MESOPOTAMIA COMMISSION.

REPORT

OF THE

Commission Appointed by Act of Parliament to Enquire into the Operations of War

IN

MESOPOTAMIA,

TOGETHER WITH A

Separate Report

BY

COMMANDER J. WEDGWOOD, D.S.O., M.P.,

AND

Appendices.

Presented to Parliament by Command of His Majesty.

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TERMS OF APPOINTMENT AND REFERENCE.

Extract from Section I of Special Commissions (Dardanelles and Mesopotamia) Act, 1916.

Be it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal and Commons, in this present Parliament assembled, and by the authority of the same, as follows :—

The following persons, namely :—

The Right Honourable Lord George Francis Hamilton, G.C.S.I.,

The Right Honourable the Earl of Donoughmore, K.P.,

Lord Hugh Cecil, Member of Parliament,

Sir Archibald Williamson, Baronet, Member of Parliament,

John Hodge, Esquire, Member of Parliament,

Commander Josiah C. Wedgwood, Member of Parliament,

Admiral Sir Cyprian Arthur George Bridge, G.C.B., and

General the Right Honourable Sir Neville Gerald Lyttelton, G.C.B., G.C.V.O.,

are hereby appointed Commissioners for the purpose of inquiring into the origin, inception, and conduct of operations of war in Mesopotamia, including the supply of drafts, reinforcements, ammunition, and equipment to the troops and fleet, the provision for the sick and wounded, and the responsibility of those departments of Government whose duty it has been to minister to the wants of the forces employed in that theatre of war.

सत्यमेव जयते

A. Procedure.

1. We, the Commissioners appointed by your Majesty under an Act of Parliament in August, 1916, have the honour to submit to your Majesty the following report:—

2. The Statute, from which we derive our authority, constituted us Commissioners for the purpose of enquiring into the origin, inception, and conduct of operations of the war in Mesopotamia, including the supply of drafts, reinforcements, ammunition, and equipment to the troops and fleet, the provision for the sick and wounded, and the responsibility of those departments of Government whose duty it has been to minister to the wants of the Forces employed in that theatre of war. We were further invested with certain powers, rights and privileges of the High Court of Justice, and we have exercised those powers to the best of our ability in obtaining evidence upon oath and in enforcing the attendance of all witnesses and the production of all documents which in any way seemed to us relevant to the subject-matter of our enquiry. The Public Departments concerned showed the utmost readiness to assist us in our enquiry and furnished us so far as we are aware with copies of all material records and documents at their disposal.

3. In the course of our enquiry we ascertained that the chief persons connected with the campaign were either in England, or could be brought home without serious detriment to public interests. There were also at home a great number of wounded and sick officers of all ranks, returned from Mesopotamia, and we have had the advantage of seeing the voluminous evidence collected in Mesopotamia and India by the Vincent-Bingley Commission. We thus found that there was a large mass of evidence at our disposal in England, and we did not feel justified in incurring the great delay and expense, which must have resulted from proceeding to India and to Mesopotamia. But in addition to the evidence available in England, we summoned home, and there appeared before us, all witnesses whose evidence was in our judgment necessary for the elucidation of our task. In one case, however, in which urgent war duties prevented an officer from vacating his post, we accepted written evidence only, without causing him to appear in person before us.

4. Early in our proceedings, allegations against an officer of subordinate rank were made, which in our judgment required investigation. We felt that our primary duty was to adjudicate upon the conduct of the higher authorities responsible for the campaign. We were most desirous to prevent our energy and attention from being diverted from this task by enquiries into a number of minor complaints against subordinate officers, and we felt that we were neither intended nor well-fitted to undertake the functions of a number of Courts-Martial or Military Courts of Enquiry. We therefore decided that in such cases we would forward the evidence tendered to us to the Military Authorities with a request that they would themselves take such action in the matter as in their judgment seemed necessary. We adopted a similar procedure also in the few instances where the tactical manœuvring and dispositions of generals under the rank of divisional commanders were seriously called in question.

5. In the Act of Parliament constituting the Commission a proviso was inserted directing us to proceed with all possible expedition to enquire with regard to the provision for the sick and wounded, and to report the result of our enquiries on this matter as soon as they were completed.

We considered this direction, but found that the medical aspects of the Mesopotamian Campaign were so inextricably involved with the other branches of our enquiry, that it would be impossible to anticipate our general Report by an interim Report on medical matters.

To have attempted to separate the conduct of our Enquiry into two distinct parts, would have led to delay, confusion, and possibly contradictory conclusions. We therefore concentrated our attention upon the whole subject referred to us, being satisfied that by this procedure we could most effectively expedite and complete our enquiry into the provision made for the sick and wounded.

It will be seen, however, that we have devoted a separate section* entirely to medical arrangements and that this section is practically a complete Report in itself, dealing with the provision for the sick and wounded.

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* See Part X.

A. Procedure.

6. Under the Terms of our Reference, we might have investigated the conduct of the Mesopotamian campaign right up to the date of reporting. We believe—and we have acted on that belief—that our main duties were to enquire into the operations antecedent to our appointment, and that to investigate into and report upon pending or present operations might seriously hamper the action of those now in charge of the campaign. We have, however, as our Report will show, satisfied ourselves that in the latter part of the campaign a marked improvement has been effected in the provision for the sick and wounded, and also in the supplies and equipment of the troops.

7. We have held 60 meetings, and we have summoned before us over 100 witnesses, of whom the more important were :—

The Marquess of Crewe, K.G., P.C., M.A., F.S.A., late Secretary of State for India.

Rt. Hon. Joseph Austen Chamberlain, P.C., M.P., Secretary of State for India.

Lord Hardinge, P.C., G.C.B., G.C.M.G., I.S.O., ex-Viceroy of India.

Lord Inchcape, G.C.M.G., K.C.S.I., K.C.I.E., Director of Anglo-Persian Oil Company.

Sir Thomas William Holderness, K.C.S.I., K.C.B., I.C.S., B.A., Under Secretary of State for India.

General Sir Beauchamp Duff, G.C.B., K.C.V.O., K.C.S.I., C.B., C.I.E., ex-Commander-in-Chief in India.

General Sir O'Moore Creagh, V.C., G.C.B., G.C.S.I., K.C.B., ex-Commander-in-Chief in India.

General Sir Edmund George Barrow, G.C.B., Military Secretary at the India Office.

General Sir John Eccles Nixon, K.C.B., A.D.C., General, late G.O.C., Mesopotamian Expedition.

Major-General Sir George Gorringe, K.C.B., C.M.G., D.S.O., late G.O.C., Tigris Corps.

Lieut.-General Sir Percy Lake, K.C.B., K.C.M.G., Chief of General Staff, India, late G.O.C., Force "D."

Lieut.-General Sir Fenton J. Aylmer, V.C., K.C.B., late G.O.C., Tigris Corps.

Major-General M. Cowper, C.I.E., late Deputy-Adjutant and Quartermaster General, Force "D."

Major-General K. S. Davison, C.B., late Inspector-General of Communications, Force "D."

Major-General G. V. Kemball, C.B., D.S.O., late Chief of General Staff, Force "D."

Major-General Sir George Younghusband, K.C.M.G., K.C.I.E., C.B., G.O.C., 7th Division.

Brevet-Colonel S. H. Climo, C.B., D.S.O.

The following officers of the Royal Indian Marine also gave evidence :—

Captain Walter Lumsden, C.V.O., C.I.E., R.N., Director Royal Indian Marine.

Commander A. Hamilton, R.I.M., late Principal Marine Transport Officer.

Captain W. B. Huddleston, R.I.M., late Principal Marine Transport Officer Force "D."

As representing the War Office :—

Major-General F. B. Maurice, C.B., Director of Military Operations.

Brigadier-General the Hon. R. Stuart-Wortley, Director of Movements.

Lieut.-Colonel H. F. P. Percival, D.S.O., Assistant Director of Supplies, appeared before us.

We have also examined a considerable number of medical witnesses, including :—

Sir Alfred Keogh, G.C.B., Director-General of the Army Medical Service.

Surgeon-General Sir William Babtie, V.C., K.C.M.G., C.B., M.B., K.H.S., late Director of Medical Services, India.

Surgeon-General H. G. Hathaway, C.B., late Assistant Director of Medical Services, Force "D."

Surgeon-General MacNeece, C.B., late Director of Medical Services, India.

Colonel P. Hehir, C.B., M.D., I.M.S., late Assistant Director of Medical Services, Force "D."

Major R. Markham Carter, F.R.C.S., I.M.S.

A. Procedure.

In addition evidence was also obtained from the following :—

Mr. E. A. Ridsdale, F.G.S., Red Cross Commissioner, Member of the Vincent-Bingley Commission.

Sir Robert Carlyle, K.C.S.I., C.I.E., late Member of the Council of the Viceroy in India.

Sir Mackenzie Chalmers, K.C.B., C.S.I., late Member of the Council of the Viceroy in India.

Sir John Hewett, G.C.S.I., late Member of the Council of the Viceroy in India, Chairman of Indian Soldiers' Fund, Member of the Joint War Committee of the British Red Cross and Order of St. John.

Sir William Clark, K.C.S.I., late Member of Council of the Viceroy in India.

Mr. J. B. Brunyate, C.I.E., C.S.I., I.C.S., Financial Secretary to the Indian Government.

We have, in addition, heard or received statements from a large number of officers of all ranks, and wherever possible, have obtained the testimony of non-official witnesses. A complete list of our witnesses will be given in an Appendix. We have also had before us many hundreds of statements of evidence taken by the Vincent-Bingley Commission, both in Mesopotamia and India.

8. A great body of evidence, oral and written, has thus come before us. Amongst the evidence are included a number of written statements by witnesses which were sworn to, but not made the subject of oral examination. Where a witness' written statement only corroborated what had already been amply established in our evidence, we did not think it necessary to cross-examine him, but we required him to attend before us and swear to his written statement, in order that it might be in the same position as other sworn evidence. These statements thus partake of the nature of affidavits.

9. In accordance with the Statutory obligation imposed upon us by the Act of Parliament by which we were constituted a Commission, we present our Report for publication to both Houses of Parliament. There is no similar legal obligation upon us to publish the evidence which we have taken. We therefore leave to the discretion of His Majesty's Government the question of its publication.

10. We must here refer to what is known as the "Vincent-Bingley Commission." In March, 1916, the Indian Government appointed a Commission, composed of the Hon. Sir William Vincent, Kt., I.C.S., Major-General Bingley, C.B., C.I.E., and Mr. E. A. Ridsdale, F.G.S., with instructions to proceed to Mesopotamia and to make enquiry under the following Terms of Reference :—

"(1) The Government of India have appointed you Commissioners for the purpose of investigating and reporting upon the arrangements for dealing with the wounded and sick in Mesopotamia, in accordance with the Terms of Reference attached.

"(2) You will proceed to Basra where you will report to the General Officer Commanding, Force "D," who will give you every facility in the execution of your duties.

"(3) Copies of all war diaries, reports, despatches, books and maps, and other information that you may require will be provided both by Army Headquarters and General Officer Commanding, Force "D."

"(4) You are entitled to call and examine any witness whose evidence you consider necessary.

"(5) All communications, including your report, will be addressed to the Secretary to the Government of India, Army Department, Simla.

Delhi. "B. Holloway, Major-General,
"Secretary to the Government of India,
Army Department."

Terms of Reference.

"(1) The Commission is appointed with the object of inquiring into and recording the arrangements made for the collection, treatment and removal of the sick and wounded during the operations in Mesopotamia to the date of your departure from Mesopotamia.

A. Procedure.

"(2) The strategical situation in Mesopotamia during the above period and the tactical obligations arising therefrom will be borne in mind throughout your proceedings.

"(3) You will distinguish clearly between the following phases :—

"(i) From the battlefields to the line of communication.

"(ii) Down the line of communication to Basra.

"(iii) At Basra.

"(iv) From Basra overseas.

"(4) In each phase, the forecast of the preparations considered necessary, the preparations actually made, and the equipment, vehicles, stores and personnel actually available at the localities, and on the vessel, during the operations, will be investigated.

"(5) The amount of river transport allotted for the medical services will be examined with regard to the total amount available, and the paramount military requirements for transportation of troops, supplies and ammunition.

"(6) You will ascertain and record the relative order of arrival of the combatant and medical units coming with reinforcements from overseas, in order to fix the responsibility for any deficiencies in personnel, equipment, and stores which could be attributed to the order of embarkation for Mesopotamia.

"(7) Having reviewed the foregoing considerations your opinion is required on the following points :—

"(i) As to whether the wounded and sick underwent any avoidable suffering and hardships during any of the phases defined in paragraph 3 above. If so, you will state the phase and will ascertain and assign the responsibility, showing whether individuals or the system were to blame.

"(ii) As to whether any avoidable shortage in the personnel, equipment, vehicles and stores occurred during any of the four phases defined in paragraph (3) above. If so, you will state the phase, the shortage, and the reasons for it, ascertaining and assigning the responsibility as in (i).

"(iii) As to whether any shortages which may have existed have now been made good."

11. The report of the Vincent-Bingley Commission was concluded and sent to the Government of India at Simla on June 29th, 1916, but was not published. The Commissioners obtained a vast amount of documentary and oral evidence in Mesopotamia and from the wounded in hospitals at Bombay, and in India. The evidence, which is comprised in two volumes containing nearly 900 pages, has been forwarded to us. We have examined its contents, and we have also taken a large amount of independent evidence upon the subjects referred to this Commission. The report of the Vincent-Bingley Commission is a very able and comprehensive document, and we have no hesitation in adopting its main conclusions. The report is enclosed in the present volume, and attached to it is a Minute of Sir Beauchamp Duff, Commander-in-Chief in India, commenting upon its proceedings.

12. The work which these Commissioners so ably performed has greatly lightened our task. Their review of the military operations and of supply and medical shortcomings is thorough and detailed, and the information was obtained on the scene of operations. Therefore we have thought it inadvisable to traverse the same ground in much detail in our report, as it can be supplemented by a perusal of the Vincent-Bingley Report, and the published despatches of Sir Percy Lake, describing the military operations up to the end of August, 1916.

B. Physical and Climatic Peculiarities of Mesopotamia.

13. On the very threshold of our report, we desire to focus attention on the physical and climatic peculiarities of that tract of country known as Mesopotamia. The area generally so called includes not only the territory enclosed between the Tigris and the Euphrates, but the country surrounding those rivers. The sole access from the sea to this country is through a channel known as the Shatt-el-Arab, and the town of Basra is situated on this channel about 70 miles* from the sea. The banks of the channel are indented by numerous muddy creeks, which require to be bridged over for purposes of land communication. Vessels drawing not more than 19 feet can make their way up to

* The mileages given are approximate, and unless otherwise stated are by river. They have been kindly verified by the Intelligence Division of the Admiralty. A map of Mesopotamia will be found in Appendix I., Annexure 11. in this Volume.

B. Physical and Climatic Peculiarities of Mesopotamia.

Basra, where the channel of the river is about ⅓ mile wide. There were, in November, 1914, practically no quays or wharfage at Basra; nor were storehouses or go-downs of any size available for the accommodation of goods; vessels were unloaded in mid-stream by primitive methods into sailing craft known as Mahailas.

14. Kurna is some 50 miles higher up this channel at the junction of the Euphrates and Tigris rivers. Between Basra and Kurna there is some 7½ feet of water in the dry season, and in the flood about 12 feet or even more. Beyond Kurna the River Tigris narrows rapidly, and between Ezra's Tomb and Kelat Sala, a stretch of 28 miles, the navigation of the river is very difficult. It twists and turns with sharp bends and hairpin corners, leaving at certain places little or no room for vessels towing a barge on either side to pass each other. The stream is strong, about four knots an hour, and it is difficult for steamers without independent paddles to avoid striking the banks when going round the corners down stream. Vessels under such conditions occasionally turn completely round, and it is a common experience to see lighters breaking adrift under the strain.

15. Amara is some 90 miles above Kurna on the Tigris, the depth of water between the two places averages 4½ feet in the low-water season, and it is estimated that in navigating this part of the river, boats should not draw more than 3 ft. 6 in.

16. Kut is again some 150 miles above Amara, but the navigation between the two places, apart from some shoal patches, is easier, and the river is broader. Baghdad is 112 miles above Kut by road and 212 miles by river, and the meandering of the river between these two places is more marked than in any other part of its tortuous course, while not more than 3 ft. 6 in. of water can be relied on. Baghdad is, distant by river, 502 miles from Basra.

Some 68 miles west of Kurna are the district and town of Nasariyeh, bordering upon the Euphrates, and access to this district is through the Hammar Lake, which in hot weather is so low as to be impracticable for vessels drawing any depth of water. The only trees in the country are date palms, wood for fuel or other purposes is unobtainable, and of stone there is not a trace, except a small quarry South-West of Basra.

17. The country traversed by these two rivers, the Tigris and the Euphrates, is a vast plain intersected by swamps, and, generally speaking, without roads of any description. Above Kut, however, there is a caravan road to Baghdad. The soil is a sandy loam which under rainfall is converted into a tenacious mud. In wet weather and floods, none of the country bordering the river below Kut is fit for wheeled vehicles, being deep in water and mud; in the dry season wheeled transport is generally practicable, if the irrigation canals are bridged or filled up.

18. The Tigris is subject to sudden floods which overrun the banks, and convert the adjoining terrain into temporary and almost impassable quagmires. The climate is exceptionally hot, damp and enervating, with periodical snaps of icy storms in the winter. In the heat of the summer a double-fly tent is an inadequate protection against sunstroke. Military movements are exceptionally difficult, the rivers being practically the only means of transport, thus limiting the radius of activity of operating forces whose communications entirely depend upon the river.

19 The Karun river, which rises in South-east Persia, and along whose left bank the oil-pipe of the Anglo-Persian Oil Co. runs, flows into the Shatt-el-Arab some 21 miles to the east-south-east of Basra. This river is more rapid than the Tigris, and though shallow in parts, is less winding and more easily navigated. The oil-pipe runs from the oil-fields down to the island of Abadan, which is situated not far from where the river joins the Shatt-el-Arab. On the island of Abadan are oil-refining works, and certain workshops belonging to the oil company.

20. There is little steam navigation upon these rivers, though Messrs. Lynch
d a small fleet of steamers running up the Karun river and also plying between Basra
Baghdad. These steamers are of a peculiar type, being specially built and adapted
eccentricities of Mesopotamian river navigation.

is brief account of the Mesopotamian plains shows that the provision of ade-
itable river transport above Basra, and of sufficient wharfage and unloading
asra, was a necessity, if effective military operations were to be carried out
expeditionary army must be sea-borne, sea-supported and sea-victualled

B. Physical and Climatic Peculiarities of Mesopotamia.

and well supplied with river transport, it was manifest from the outset that without these facilities the orderly despatch and distribution of the reinforcements, ammunition, stores and supplies necessary for the well-being and replenishment of an advancing force, would be almost impossible. The treacherous climate, and the alternation of sweltering heat and bitter cold in these regions made the continuous supply of such articles as warm clothing, double-fly tents, sun-helmets, spine-pads, goggles, ice, ventilating-fans, mosquito-nets, quinine and other tropical prophylactics indispensable, if the health and *moral* of the troops were to be maintained at their accustomed high standard. Full rations, varied from time to time to counteract the climatic diseases of the country, were very requisite. Sickness, even with a full supply of such palliatives, was certain to be high, necessitating abnormal hospital accommodation in addition to the ordinary provision for military casualties. Hence it is clear that all the conditions of the campaign indicated the necessity for very ample transport.

22. By the expression "transport" we mean, not only the provision of the necessary river steamers—in itself no easy task—but the conversion of Basra into such a port as would make it an adequate base of operations for a large inland expedition. The latter task required an experience and knowledge not possessed by the ordinary soldier and marine officer in the employ of the Indian Government. It necessitated the engagement of those who had a knowledge of the organisation of a port and were accustomed to the handling of large masses of traffic. But the mere engagement of such officials would not be enough in itself, unless they were authorised to incur heavy expenditure, and had at their disposal the necessary personnel and matériel. Such work, moreover, requires foresight and time for its effective fruition. Hasty improvisation on a large scale was not possible, and this criticism equally applies to the provision of river craft.

C. Condition of Indian Army on Outbreak of War.

23. For some years previous to the war a strong economy campaign had been carried on in India by the Indian and Home Governments, especially in connection with military expenditure. The gradual extinction of the opium revenue, amounting to three millions sterling, and the friendly understandings arrived at with Russia, were both treated as reasons for a reduction of military establishments in India. On September 9th, 1909, Lord Kitchener was succeeded by Sir O'Moore Creagh as Commander-in-Chief. During his regime a strong and continuous pressure in the direction of economy was exercised, with the support of the Viceroy, over the detailed demands of the Military Budget. Reductions were made on the assumption that the Indian Army need not contemplate the likelihood of a collision outside India with the army of a European power, and the provision for the equipment, organisation and transport of the Indian Army was regulated by the requirements of frontier warfare alone. The proportion of field guns per division was cut down to a very low point, and of guns of a large calibre there were practically none, as no increase to existing expenditure was to be sanctioned, while the number of divisions available for immediate mobilisation was reduced from nine to seven. There was a considerable exchange of opinions between the Home and Indian Governments upon these reductions, and the last of a series of despatches relating to the help which, in view of the economies effected, India would henceforward be able to afford the Empire in war time, was only written by the Government of India on July 30th, one day before the outbreak of war. An aircraft establishment had been started a few months before, but its scope was very limited.

24. The Indian Army was therefore relatively, as regards mechanical equipment, guns, etc., in a less favourable position to confront European troops than it was at the time of the South African War; but in no branch of military expenditure was the pressure so much felt as in connection with the medical establishments. According to high medical authorities the whole standard of medical establishments, of hospital equipment, and field ambulances in India has been for years past much below that in vogue in the Army. In consequence of the financial pressure alluded to, little or nothing was raise this standard, whilst reserves, both of personnel and matériel, had been a very low ebb when the war broke out.

25. The Indian Army was thus suddenly and unexpectedly called upon largely in an external warfare for which no preparation had been made, as t

C. Condition of Indian Army on Outbreak of War.

of such a conflict had been assumed both by the Home and Indian Governments to be outside the sphere of reasonable probability, and the possibility of it occurring was actually under discussion on the outbreak of war in August, 1914.

26. Under the existing organisation India was almost entirely dependent upon Great Britain for her supply of white officers, and a very large proportion of her war munitions come from the same source. British officers on the Indian establishment, who were on leave in England on the outbreak of war were impounded by the War Office, and an almost entire cessation of supply of war material was caused by the immense demands of the new armies raised in Great Britain. From this combination of untoward circumstances India found her resources for oversea expeditions somewhat exiguous, while the demands made upon her were large and comprehensive.

D. India's Oversea Expeditions on Outbreak of War.

27. A number of telegrams were laid before us showing the series of demands made upon India on the outbreak of war in connection with expeditions to be sent oversea. These expeditions were known as Expeditions A., B., and C.— A. being the expedition to France and Egypt, B. a defensive expedition to East Africa, and C. an offensive expedition to East Africa. The Indian Government strongly protested against being called upon to provide Expedition C., but they were overruled. Under protest they accepted the demands made upon them, but they pointed out that they would have extreme difficulty in supplying any expedition for work at Basra or in Mesopotamia. The composition and strength of these expeditions were settled by the end of September, 1914, *i.e.*, before the Mesopotamian Expedition, known as Force "D," was decided upon.

28. Generally speaking, the arrangements made were that the control and conduct of the expeditions A., B., and C. should be under the Home Government, who ultimately undertook to maintain the whole forces and provide the drafts and reinforcements for all troops other than native Indians. But at the beginning of the war the expeditions were equipped, and to a large extent maintained, out of India's resources, it being agreed that the whole expenditure over and above the ordinary cost to India of the forces engaged was to be borne by the Imperial funds. Certain other work in connection with sea transport and other branches of service was also given India, for which she was reimbursed.

29. It should be noted that practically the whole of the important telegrams which have been produced to us relating to Imperial demands upon the Indian Government for military expeditions outside India, and the replies of India to these demands, are "private" telegrams. A private telegram is the property of the person who sends it, and it is not the practice to record it on the file of any public Department, though this may be done at the option of the sender. Such telegrams are kept by the Private Secretaries and are, as a rule, taken away at the termination of office by the person who sends or receives them. Later on in our report we shall allude to this practice and its consequences.*

30. Before passing on to the consideration of the Mesopotamian Expedition, we think it right to draw attention to the demands which, in their totality, the overseas expeditions have imposed upon India. Lord Hardinge has told us that "Approximately 80,000 British Officers and men and 210,000 Indian officers and men were despatched overseas, inclusive of drafts and reinforcements." In considering, therefore, as we shall proceed to do, the Indian Government's responsibilities in Mesopotamia, it is fair to remember that the Mesopotamian Expedition was only part of a larger effort, which involved not only the maintenance in India of a considerable army for interior and frontier defence, but also the despatch overseas of troops approximating in number to the total army maintained in India before the war.

* See Part XI. (page 102).

1. Towards the close of September, 1914, it became self-evident that Turkey was likely to become a hostile belligerent, and in anticipation of this contingency Sir Edmund Barrow, Military Secretary of the India Office, wrote a Minute on September 26th, 1914, entitled: "The rôle of India in a Turkish War." He was strongly in favour of an expedition being sent to occupy Basra, and he concluded his Minute in the following words :—

This seems the psychological moment to take action. So unexpected a stroke at this moment would have a startling effect :

(1) It would checkmate Turkish intrigues and demonstrate our ability to strike.

(2) It would encourage the Arabs to rally to us, and confirm the Sheikhs of Muhammerah and Koweit in their allegiance.

(3) It would safeguard Egypt, and without Arab support a Turkish invasion is impossible.

(4) It would effectually protect the oil-installation at Abadan.

Such results seem to justify fully the proposed action.

2. With regard to the oil-installation referred to, we may explain that it belonged to the Anglo-Persian Oil Co., in which the British Government had recently become large shareholders on account of the importance attached by the Admiralty to the oil-supply from the Company's wells.

3. A considerable correspondence now took place between India and England, from which it appears that Enver Pasha and a number of German confederates were intriguing against the British Government, and that arms and ammunition were being sent to different places in Turkish territory, that many secret emissaries, including German officers, were about to try and raise a Jehad in the countries lying between Mesopotamia and India.

4. The Government ultimately decided, after consultation with India, that a part of Expedition A should be diverted to the Persian Gulf, and that it should land at Bahrein. The proposal seemed sound and justifiable in itself, as it was likely to prove an effective counter to German and Turkish intrigues. The force demanded by the India Office was originally only a brigade of the Sixth Division to be followed by the remainder of that division at a later date. In the telegrams which passed the Indian Government say :—

It is assumed you are satisfied the advanced brigade is sufficiently strong for the purpose required, but, as we are unaware of its instructions and objective, we cannot judge of this.

Is it your opinion that the expedition should be managed direct by the Indian Office, or do you desire it to be run by us ?

In reply to this request for information, the Secretary of State on October 5th, stated that —

The intention is to occupy Abadan, with the Force under orders, protect the oil-tanks and pipe-line, cover the landing of reinforcements, in the event of such being necessary, and show Arabs that our intention is to support them against the Turks. With a warship at Muhammereh the troops detailed are considered ample for the purposes mentioned. In the event of Turkey becoming a belligerent the management of the expedition will devolve on you, but I will, of course, communicate with you regarding the scope of the operations. In the meanwhile you should make preparations for the despatch of the remainder of the Division.

5. But the Imperial Government, in initiating this expedition apparently did not fully realise that such an expedition, if once started, might require reinforcement and enlargement beyond the one division suggested, and was sure to provoke violent opposition from the Turks who, under German supervision and control, would make strenuous efforts to drive the British forces out of Mesopotamia.

6. The expedition, which started from Bombay under General Delamain, received sealed orders, and arrived at Bahrein on October 23rd. Every effort was made to quiet the Arabs' apprehensions, and our political officers were successful in securing that object. On the 5th November war with Turkey was declared. Two fresh brigades were sent out under Sir A. Barrett which arrived on November 14th, and on November 22nd Basra was occupied without much difficulty after a number of skirmishes. So far the expedition had been a complete success, and in less than three weeks Basra—the key to Mesopotamia—had been taken and occupied. The suddenness and secrecy of the move had not only ensured success, but it had done so at very small cost to the expedition.

7. The force, which now amounted to a division, was armed and equipped as for a frontier expedition, and its medical equipment was even below that scale, but the conditions which this expedition had to face, both climatic and military, proved to be of a very different character from those which prevail on the frontiers of India.

8. General Delamain's instructions were as follows :—

INSTRUCTIONS.

For the Officer Commanding, I.E.F. " D."

(1) The rôle assigned to your force is that of demonstrating at the head of the Persian Gulf. You will bear in mind that Great Britain is at peace with Turkey, and that you are therefore on no account to land troops in Turkish territory or to take any hostile action against the Turks without orders from the Government of India, except in the case of absolute military necessity.

(2) You will occupy Abadan Island with the object of :—

(*a*) Protecting the oil refineries, tanks and pipe line.
(*b*) Covering the landing of reinforcements, should these be required.
(*c*) Assuring the local Arabs of our support against Turkey.

(3) With these objects you may disembark the whole or such part of your force as you consider necessary at Abadan Island or Muhammareh, preferably at Abadan. In deciding on the point of disembarkation, however, you will work in concert with the naval and political authorities.

(4) In your dealings with the Arabs in Persian or Turkish territory you should be careful to avoid any action which is likely to cause friction with them, as their co-operation may be required in the event of a rupture with Turkey.

Communication will be opened with :—

Bin Saud, Shaikh (Amir) of Najd,
The Shaikh of Muhammareh,
The Shaikh of Kuwait

with the object of informing them of the despatch of your force.

(5) You will notify the arrival of the force off Abadan Island, and thereafter the progress of the disembarkation to the Chief of the General Staff, Simla.

(6) The destination of your force is being communicated to the following only :—

Naval Commander-in-Chief,
Resident, Baghdad,
Consul, Basra,
The three chiefs above-mentioned,
Major Smyth,
Political Officer with your force (Sir P. Cox).

(7) In the event of hostilities with Turkey, the remainder of the 6th (Poona) Division is being held in readiness to support your force, and will follow as quickly as possible.

In the meantime you will take such military and political action as you think feasible to strengthen your position, and, if possible, occupy Basra.

9. As before stated, on November 14th, Lieut.-General Sir A. Barrett arrived in Mesopotamia and took over command. We enclose all the operative portions of his orders which are relevant to our enquiry :—

ORDERS.

(1) The 16th Brigade under General Delamain is now on board its transports off Bahrein, Persian Gulf; and has been directed to hold itself in readiness for immediate action as required.

(2) The troops named in the margin will embark as soon as possible to reinforce Genera Delamain. You, with your divisional headquarters, will accompany this reinforcement, and on arrival assume command of the whole force detailed for operations at the head of the Persian Gulf. This force is designated Indian Expeditionary Force " D."

(3) Your objective will be telegraphed to you . .

(4) Your disembarkation will be concerted in closest touch with the Senior Naval Officer, on whose ship you should travel if possible.

(5) Sir Percy Cox is now with General Delamain as Political Officer; he will come under your orders.

(6) Enclosed for your information and guidance are :—

(*a*) Copies of orders given to General Delamain.

In addition to rations for the voyage, two months' supplies for the whole force, including baled fodder for animals and fuel.

(12) You will acknowledge receipt of these orders and enclosures by wire to the Chief of the General Staff, Army Headquarters, Delhi.

These orders were supplemented by the following telegram from the Chief of the General Staff, India, to General Barrett, dated November 13th :—

Please see the third paragraph of your orders. Your objective is Basrah. If after discussion with and taking over from Delamain, you consider your present force strong enough, you will move on Basrah.

1. As soon as we had established our occupation of Basra, it was suggested by our Political Agent on the spot, Sir Percy Cox, that an announcement should be made that the occupation would be permanent. This suggestion was peremptorily swept on one side by His Majesty's Government, on the ground that it would be utterly contrary to the agreement come to between the Allies, if occupation of any conquered country were at once announced to be permanent, without waiting for the final settlement to be made at the close of war. But whilst this proposal was stopped, the Military Secretary of the India Office submitted, on November 27th, that it would be advisable to push on and occupy Kurna, 50 miles above Basra at the junction of the Euphrates and the Tigris. The advantages of this position were :—

(1) Its commanding military value.

(2) The control it gives us of the whole navigable waterway to the Gulf.

(3) The possession of the whole of the rich cultivated area from Kurna to the sea.

(4) The fact that it completely covers Persian Arabistan and safeguards it from Turkish intrigues or incursions.

(5) The moral effect on the Arabs.

(6) The control of the telegraph up to this point and also of the passage of the Euphrates.

2. Lord Crewe, who was Secretary of State for India at this time, whilst ready to assent to an advance on Kurna, deprecated any idea of a further advance for the present. Operations against Kurna were successfully concluded on December 9th by the surrender of the town together with the Wali and 1,200 prisoners and nine guns. Our authority was thus established over the whole of the river tract between Kurna and the sea.

3. Early in 1915 news was received of a Turkish concentration for an attack on Basra, and the oil-pipe was threatened up the Karun River. The threatened attack of the Turks and the unrest of the Arabs necessitated further reinforcements, and another brigade was sent from India, arriving on February 7th, 1915. The Indian Government, though reluctant at first to send any further troops, finally acquiesced in the despatch of this force. This reinforcement proved insufficient, and the position became somewhat critical. There was an unsuccessful skirmish up the Karun River near Ahwaz, and the situation became so acute that on March 5th the Government of India were peremptorily ordered by the Home Government to despatch another brigade. The Government in England at the same time entirely relieved the Viceroy and Commander-in-Chief from any responsibility as to what subsequently might occur in India from this further depletion of their available military reserves. This brigade, with two others, made up the second Division in Mesopotamia, which is hereafter known as the Twelfth Division.

4. On April 1st, the Government of India decided, but without obtaining the consent of the India Office, to reorganise the expedition as an Army Corps, and General Nixon and Staff were landed on April 9th. At Basra, General Melliss, with the additional forces previously sent, achieved a brilliant victory at Barjisiyah near Basra on April 14th, 1915, and there had also been successful fighting two days previously, near Shaiba. These victories and the increase of force enabled the expedition to consolidate its position ; but, though the force was doubled, the medical equipment sent to the two last brigades was not up to the authorised scale of equipment, and practically two divisions had medical equipment for only one, and their equipment was upon the Indian and not the British scale. Neither was there made such an addition to the river steamer transport as to bring its proportions up to the requirements of the increased forces. These deficiencies do not seem to have had sufficient recognition by the Government of India.

1. Sir John Nixon's assumption of the command of the Expedition makes a landmark in its history. The occupation of Kurna which had taken place in December, 1914, and the victory at Barjisiyah which coincided with his arrival, had realised the plan of the British Government in sending the Expedition, save that something still remained to be done to complete the protection of the supply of oil. Now we enter upon the story of operations which are distinguished from the earlier ones by three features.

First, the initiative (except in regard to the security of the oil-supply) no longer comes from London, but from Sir John Nixon, obeying the general instructions of the Indian Government, and sustained by their concurrence. Secondly, though the earlier advances up the Tigris are recommended only by the need for consolidating and defending what has already been gained, the influence of a desire to move forward towards Baghdad becomes more apparent. Thirdly, the problem of river transport becomes of crucial importance.

2. On the appointment of General Nixon as Commander of the Army Corps. he was given written instructions by Sir Beauchamp Duff before leaving India on March 24th, 1915, and those instructions were as follows :—

(1) Indian Expeditionary Force "D," now operating in Mesopotamia under the command of Lieutenant-General Sir A. A. Barrett, K.C.B., K.C.V.O., has been reinforced and raised to an Army Corps Command, the details and organisation of which are shown in a proof copy of Organisation Orders, Force "D," attached.

(2) You will proceed to Basra, and take over command of I.E.F. "D" from Lieutenant-General Sir A. A. Barrett, who will retain command of the 6th Division.

(3) Please report by wire, both to the Chief of the General Staff, Simla, and to the Secretary of State for India, the date on which you take over the command.

(4) You will render a daily report of your operations to the Secretary of State and to the Chief of the General Staff, Army Headquarters, Simla.

(5) Sir Percy Cox, who is now with Lieutenant-General Sir A. Barrett as Political Officer, will come under your orders.

(6) Instructions as to the operations of your force are in a separate document

Operations.

(1) Your force is intended to retain complete control of the lower portion of Mesopotamia, comprising the Basra vilayet and including all outlets to the sea and such portions of the neighbouring territories as may affect your operations.

(2) So far as you may find feasible, without prejudicing your main operations, you should endeavour to secure the safety of the oilfields, pipe-line and refineries of the Anglo-Persian Oil Company.

(3) After acquainting yourself on the spot with the present situation you will submit :—

(i) A plan for the effective occupation of Basra vilayet ;
(ii) A plan for a subsequent advance on Baghdad.

(4) In all operations you will respect the neutrality of Persia so far as military and political exigencies permit.

Reports on Special Points.

The following points are to be especially reported upon by you, after examination of the conditions in Mesopotamia :—

(i) The advisability of reinforcing 6th Cavalry Brigade by one regiment of Imperial Service Cavalry, which could be utilised for guarding the oil pipe-line.

(ii) The quantity and description of animal transport required for Force "D" in the operations contemplated.

(iii) The employment of a light railway, of which 137 miles of track, 20 locomotives, 240 trucks, 23 brake vans and 2 traction engines are reported available and in good condition.

(iv) The employment of armoured motors and mechanical transport.

(v) Aircraft.

(vi) The adequacy and suitability of the river gunboats and transports *en route*, namely :—

2 Nile gunboats, armament not yet known.

7 Paddlers from the Irrawaddy Flotilla Company, with 2 flats from Eastern Bengal State Railway.

2 motor-boats.

4 tugs.

4 steam launches and 2 steam cutters and 2 horse-boats, understood to be coming from Egypt.

3. At the time these instructions were given to General Nixon they were not known to the Home Authorities, though they were subsequently sent by mail to the India Office, where they were received on May 2nd. In his evidence before us, the Viceroy also stated that he did not remember having seen these instructions.

On April 22nd, General Townshend arrived in Mesopotamia, and took command of the 6th Division. On the 24th, General Nixon directed him to proceed at once to Kurna and reconnoitre the Turkish position north of that place with a view to attacking it.

In the meantime the Home Government was concerned as to the safety of the oil pipe and on the 19th, the Secretary of State urged an immediate move against the Turks in that region, and on the same day General Nixon asked India for another Cavalry Brigade in the following terms :—

The Cavalry Brigade now with this Force cannot meet the demands which will shortly be made on that arm. The despatch of another Cavalry Brigade which should include a British Cavalry Regiment is requested. It is very necessary that we should have the British unit. In view of heavy work which obstructions in the river, and other works will cause, I also beg for the despatch of a battalion of Pioneers.

4. In reply to Sir John Nixon's request the Viceroy regretted that he was unable to supply any more Cavalry, and on April 24th, the Secretary of State made the following communication to the Viceroy :—

Your decision in connexion with Nixon's request for a brigade of Cavalry is concurred in. To say nothing of the impossibility of complying with his request the approach of the hot season renders it undesirable to despatch any more troops, especially British. An important offensive movement is indicated by Nixon's demand. Any advance beyond the present theatre of operations will not be sanctioned by Government at this moment, and I presume Nixon clearly understands this. During the summer we must confine ourselves to the defence of oil-interests in Arabistan and of the Basra Vilayet.

If an advance to Amara with a view to establishing an outpost for the purpose of controlling tribesmen between there and Karun, thus adding to the security of the pipe-line is possible after smashing the enemy in the direction of Karun I should, if such a proposal received your support, be prepared to sanction it. Any proposal involving possible demands for reinforcements or undue extension is to be deprecated however.

Our present position is strategically a sound one and we cannot at present afford to take risks by extending it unduly. In Mesopotamia a safe game must be played.

This telegram was apparently sent in ignorance that Sir John Nixon's instructions from India involved the occupation of the vilayet of Basra, which includes both Amara and Nasariyeh, and extends to within a few miles of Kut-el-Amarah.

5. General Nixon at that time had two military objectives in view—one on the Karun and the other on the Tigris River. He had at his disposal the Sixth and Twelfth Divisions and a Cavalry Brigade. There had been trouble up the Karun River, and General Gorringe, with two Infantry Brigades of the Twelfth Division and one Cavalry Brigade, was sent up to reopen communications with Ahwaz and to punish the enemy. This he did very effectively, and he was able to demonstrate on his left flank towards Bisaitin. This operation greatly assisted the impending advance of General Townshend up the Tigris, and the floods prevented reinforcements from joining the Turkish forces on the Tigris in time to oppose General Townshend's advance. The Turkish forces facing General Gorringe were so delayed on their march to Amara, that when they eventually reached it they found General Townshend in occupation of the town. A portion of their advance guard was captured, and the remainder had to seek safety in dispersion with the loss of two guns.

6. The Viceroy had advocated the advance to and occupation of Amara. Amara town possessed importance, not only from an administrative and commercial point of view, but also as a strategical military post, and there were obvious advantages likely to accrue from its occupation. On May 23rd, the Viceroy indicated in a telegram that Sir John Nixon proposed to take the offensive towards Amara, but he would not proceed beyond Amara without the sanction of the Secretary of State. In reply, on May 23rd, the Secretary of State sanctioned the proposed movement—

On the clear understanding that the General Officer Commanding Force "D" is satisfied that he can concentrate a sufficient garrison at Amara to defy any attack from Baghdad during the summer. . . . We can send him no more troops and he must clearly understand that his action must be guided by this fact. Arrangements for the move in question must have been made some days back, and I am of opinion that General Nixon should have submitted his proposals before the last moment. Under present circumstances only the Cabinet should decide questions jointly affecting civil and military policy.

As in the case of the telegram of April 24th, this communication seems also to imply a lack of appreciation by the Home Government of the scope of Nixon's instructions from India.

7. On May 27th, Lord Crewe left the India Office and was succeeded by Mr. Chamberlain, who at once endorsed his predecessor's policy of caution in the following words on May 28th :—

Till I know the immediate objects contemplated and the force with which General Nixon is advancing, I am unable to give further instructions. Our policy must depend partly on local factors, forces locally available, and partly on situation elsewhere. I should like to be informed what force General Nixon considers necessary for garrisoning Amara, and how generally he proposes to distribute his troops during the summer if the occupation of that town is contemplated.

In reply to that telegram the Viceroy, on June 2nd, generally supported the advance, and he added the opinion that it would be undesirable or dangerous to tie down General Nixon with precise orders in case they might not fit in with the local situation confronting him. "Under the original instructions he will, as soon as he is in a position to do so, submit a plan for the occupation of the Basra vilayet, which includes Amara. . . . We should not propose to authorise any advance beyond Amara for which his force is not adequate."

8. The advance on Amara—or "Townshend's Regatta," as it was called locally—was then very successfully carried out by that General. Boats of light draught were converted into light-armoured gunboats, and were very effective. The enemy were pursued with unrelenting vigour, in spite of the sweltering heat and the difficulties of navigation, and were driven from position to position. On June 3rd Amara was reached, and General Townshend with 22 sailors and soldiers achieved the surrender of a garrison of 700 Turks. Next day the Norfolk Regiment arrived, and all further opposition collapsed. As a military operation this action was audaciously planned and well-timed, and it deserves high praise, as it achieved great objects with comparatively small loss of life.

9. General Nixon now proposed, with the full support of the Government of India, to strike in the direction of Nasariyeh, a place which is 68 miles west of Kurnah, access to it being through the channel of the Euphrates and the Hammar Lake. The heat was terrific; still General Nixon deemed it expedient to carry on the enterprise. Major-General Gorringe, who was in charge of this column, succeeded in capturing Nasariyeh on July 25th, with 950 prisoners, 17 guns and much booty. These operations were initiated by the General on the spot, supported by the Commander-in-Chief and Viceroy of India, and acquiesced in by the Secretary of State. They appear to us to be sound from both a military and political point of view. Our casualties amounted to 533 of all ranks, but there was also much sickness.

10. This succession of victories seemed to stimulate the authorities in India to a fresh advance, and on July 27th the Viceroy sent a telegram to the Secretary of State to the effect that, "Now that Nasariyeh has been occupied the occupation of Kut-el-Amara is considered by us to be a strategic necessity." Communications ensued between the Secretary of State and the Viceroy, and ultimately the Secretary of State assented to the advance and accepted the military arrangements which General Nixon proposed to make after the advance.

11. On September 14th, the Headquarters of the Sixth Division reached Sheikh Saad, and on the 15th Abu Rummanah, which had been very strongly fortified by the Turks, was captured by us. On the 29th, after severe fighting, the Turks were in full flight, and our cavalry had entered Kut-el-Amara. During the fight we captured more than 1,700 prisoners and 13 guns, and inflicted heavy losses in men and material. This part of the campaign, again, was brilliantly executed by General Townshend and the Sixth Division of the Indian Army, and the whole series of military operations during the past three months had been so extraordinarily successful, that it is not surprising that a spirit of optimism and over-confidence as to what could be achieved overcame General Nixon and his Headquarter Staff. It is sometimes as dangerous to over-estimate victories as to under-rate them. These successes had been achieved by striking quickly and continuously, pursuit after victory being intense and persistent. Audacity had accomplished wonders; was there any limit to its possibilities?

12. Although the expedition had by hard fighting achieved externally a series of military successes, there had been even from the beginning of the campaign signs that the internal organisation, as regards river transport and the distribution of supplies through such transport, was working at its maximum capacity. From the time the expedition moved above Kurna, the river transport had been either insufficient or barely sufficient for its wants and could not sustain additional pressure. For reasons which we will subsequently examine, the provision of the type of steamer and barge specially adaptable to the Tigris had been delayed. Railway schemes had either been put on one side or not pressed by the Indian Government. On July 10th, Sir John Nixon forwarded to India a demand for six paddle-steamers, three stern-wheelers, eight tugs and forty-three barges. In making this demand, Sir John Nixon stated that—

"The inadequacy of the light-draught fleet available has, nevertheless, been a constant source of delay, uncertainty and anxiety. Now that it is clear that time and experience will not mend matters, but that wear and tear and the course of events must inevitably tend to steady diminution of the shipping fit for military operations in these rivers, I would strongly urge that the six paddlers, etc. . . . asked for in my telegram under reference, may be provided."

13. A full and complete memorandum by General Kemball, Sir J. Nixon's Chief of the Staff, was forwarded with this request. In the memorandum he reviewed the whole position of the river transport, pointing out the inability of the present fleet to comply with the existing wants and the probability of a diminution in its effective number through breakdown and want of necessary repairs. He concluded by saying :—

In short, more powerful light-draught river steamers and plenty of them, and not only ships, but personnel and material for their maintenance, are regarded by the general Staff of this Force as our principal need.

It is also thought necessary to add the warning that if steps are not taken in good time to meet these requirements we are running grave risks of a breakdown at possibly a serious moment.

At the present time we cannot make the most effective use of the troops available owing to want of ships, and in any crisis insufficiency of river transport would limit the scope of reinforcements, while a breakdown of shipping might have still more serious consequences.

A properly equipped river fleet would double and treble the effective value of the Army in occupation of Mesopotamia at the present moment, and would continue to be an important military asset, even if a broad-gauge railway to Baghdad were built. The formation of this fleet is considered therefore as our special and most important need at the present time.

14. The additional transport asked for was sanctioned after a lengthy correspondence, but the execution of the order under any circumstances would have taken from 8 to 10 months before completion, and the ships would then have had to be conveyed either under their own steam or piecemeal to Basra. Under no circumstances could they have been available in Mesopotamia till towards the middle of the year 1916.

15. At this time the medical equipment of the expedition was not up to its proper strength, even according to the low scale of Indian regulation. Although there had been no actual breakdown, the wounded and sick, both in the actions on the Karun, at Nasariyeh, and at Kut-el-Amara had been put to considerable discomfort through lack of ambulance transport, stationary hospital accommodation and river hospital steamers. The medical personnel was barely sufficient. Any further forward movement up the river, associated with an influx of reinforcements at Basra, was almost certain to convert the existing deficiencies in medical personnel and *matériel* into a deadlock of the whole system, unless exceptional and continuous good luck should attend the new offensive movement.

16. General Nixon had now secured at Kut a highly convenient halting place. It was well described by Sir E. Barrow, Military Secretary at the India Office :—

If we sit tight at Kut-el-Amara, we can consolidate our control of the Basra Vilayet, and fortify a strong position at the apex of the triangle formed by the Tigris and the Shatt-el-Hai, which with our naval command of the rivers, would be unassailable by any but a very superior force accompanied by heavy artillery, while it would at the same time completely cover the main approaches to the territory now occupied by us.

There were other considerations in favour of calling a halt. The 6th Division had had very hard work, and almost continuous fighting in a very trying climate, and though it had done all that was demanded of it, it was not the fine fighting machine it had been.

PART V.—CORRESPONDENCE AND TELEGRAMS AS TO ADVANCE ON BAGHDAD.

1. Baghdad and the possibility of its becoming an objective of the expedition constantly crops up in the evidence before us. On October 8th, 1914, *i.e.*, a week before the expedition had actually left India, the Viceroy wrote unofficially to the Marquess of Crewe to the effect that he would be ready for an attempt on Basra " or even Baghdad " in the event of Turkey declaring war. On November 23rd, the day after Basra was occupied by General Barrett's forces, Sir Percy Cox, the Indian Government's Political Representative in Mesopotamia, telegraphed to the Viceroy : " With General Officer Commanding, I have been studying topographical details bearing on an advance to Baghdad in case such an advance should be decided upon," and he proceeded to outline a reasoned proposal for an advance on Baghdad ; while three days later, on November 26th, the Senior Naval Officer in the Persian Gulf wrote to the Indian Government indicating what his requirements in gunboats would be in the event of an advance up the Tigris to Baghdad.

2. The Viceroy forwarded Sir Percy Cox's proposal for an advance on Baghdad to the Secretary of State on November 25th, and on November 27th Lord Crewe telegraphed back : " We are not disposed to authorise an advance to Baghdad at present." This decision was arrived at before the Secretary of State was in possession of the Viceroy's views, but it appears from a subsequent letter that, after consulting the Commander-in-Chief in India, the Viceroy did not think Sir Percy Cox's project feasible at the time. The letter in question, which is dated December 2nd, contains such cogent reasons for rejecting a proposal which was subsequently almost enthusiastically accepted, that we think it instructive to quote the following passages :—

VICEROY TO SECRETARY OF STATE.

You did not give me time to send you our views on Cox's proposal to advance to Baghdad, for you sent me a telegram crushing it. As a matter of fact, after consultation with Beauchamp Duff, I had arrived at the conclusion that it would be impossible to execute at present. Unlike Basra, which is easy to capture from the south and very strong against any attack from the north, Baghdad has no advantages as a position against an attacking enemy, and, being an extensive town situated on both banks of the Tigris, would be particularly difficult to defend. All communications with Baghdad would have to be by water, and Baghdad is about 500 miles up the river from Basra and 570 from the Gulf. It would not be possible to entrust this long line of communications to the Arabs, since, if they failed, a disaster must result. To avoid undue risk, it would, in the opinion of the Commander-in-Chief, have been necessary to have a whole division in Baghdad and another on the line of communications, to keep them open in the first instance and also ready to reinforce Baghdad if attacked. In view of the large number of troops that we have sent overseas and the very reduced military forces remaining in India, it would be impossible for India to carry out this scheme even with reasonable safety. In the absence, therefore, of extraneous assistance, those political advantages, which are really considerable, that might accrue from the capture and occupation of Baghdad must be subordinated to the military objections that would be involved in such a course.

3. It will be seen that the terms of Lord Crewe's telegram of November 27th, whilst deprecating an advance on Baghdad at that time, did not specifically rule out such an advance as a possible operation in the future. It is quite clear that India at any rate did not consider this telegram as an absolute veto on Baghdad as a possible objective, for on February 12th, 1915, we find the Viceroy telegraphing to the Secretary of State : " Baghdad will consequently probably become our objective, and no harm will be done if in our dealings with Persian Government we contemplate that contingency."

4. We have already noticed that amongst the orders given by Sir Beauchamp Duff to Sir John Nixon on March 24th, 1915, was an instruction to " prepare a plan for a subsequent advance on Baghdad." This plan was not forwarded to India by Sir John until August 30th, 1915, but it is clear, from papers submitted to the Commission, that in December, 1914, and June, 1915, if not on other dates, appreciations were prepared by the General Staff in India on the subject of an advance to Baghdad. Sir John Nixon's plan was a reasoned appreciation of the military situation on the Tigris at the time. In it Sir John does not refer to his own difficulties in regard to transport, nor to the inevitable augmentation of these difficulties, which would result from prolonging his line of communications by over 200 miles. But he sets out very clearly the advantages of following on the heels of the Turkish Army fleeing into Baghdad after a defeat in the neighbourhood of Kut ; and he contrasts with this plan, unfavourably and almost prophetically, the dangers of having to fight his way to Baghdad through a Turkish Army well entrenched above Kut. Such an operation, he says, " might be more difficult and costly than anything yet met with, and the result of a check be more serious for us."

5. Sir John Nixon's plan was favourably endorsed by Sir Percy Lake, then Chief of the General Staff, at Simla, and sent by him, on September 9th, to the Commander-in-Chief, Sir Beauchamp Duff, who, however, minuted Sir Percy Lake's memorandum, " unless we can get back troops from France, Egypt, or elsewhere, I fear that Baghdad, invaluable as its capture would be, is out of the question."

6. It is not clear whether Sir John Nixon's plan and the Commander-in-Chief's Minute on it, were ever sent to England or submitted to the Viceroy, but it is clear that the latter never ruled out from his mind the possibility of advancing to Baghdad in the future. Thus, on August 27th, in writing to Sir Thomas Holderness, the Viceroy advocates an advance to Kut-el-Amara, and points out that " at Kut-el-Amara we are in a good position to strike at Baghdad should the necessity arise and more troops be available." Again, on September 17th, in writing to Mr. Chamberlain, he emphasises the desirability of advancing to Baghdad if only sufficient troops can be made available.

But whatever may have been in the minds of the authorities in England, India and Mesopotamia, with regard to Baghdad as an ultimate possibility, it does not appear to have been brought forward as an immediately practicable proposition until October 3rd.

7. The position of the Expeditionary Force at that time was as follows :—Kut had been occupied on September 28th, and General Townshend, with characteristic dash, had pushed on his cavalry in pursuit of the enemy, and on October 4th they were at Aziziyeh, some 50 miles beyond Kut on the road to Baghdad.

On October 3rd, General Nixon, as General Officer Commanding the expedition, telegraphed to the Secretary of State :—

" I consider I am strong enough to open road to Baghdad, and with this intention I propose to concentrate at Aziziyeh."

On the next day he telegraphed to India :—

" With reference to my suggestion to open by another general action the road to Baghdad, will you kindly let me know whether my force is to be reinforced to the extent of another division from France in order that my position there may be maintained."

These telegrams were despatched on the assumption that the demoralisation of the retreating force was such that our pursuing vanguard could get into Baghdad upon their heels. But only a day later it became clear from further communications that the enemy were not so disorganised as to prevent their making a serious stand, and General Townshend was cognisant of this fact.

8. On the 5th October General Nixon telegraphed that the enemy appeared to be no longer retreating, but had occupied the Ctesiphon position, and thereby constituted a threat to us. Still, he considered it desirable to smash him while he could, and he " saw nothing which would justify letting slip such an opportunity." It is necessary to emphasise this point, as it is clear from subsequent telegrams that the sanction of the Home Government to advance on Baghdad was given on the supposition that the Turks between Kut and Baghdad were not likely to offer really serious opposition. The policy of the Cabinet up to that date in Mesopotamia had been defined by Lord Crewe in a telegram dated April 24th, 1915, to the Viceroy, the concluding words of which were :

Any proposal involving possible demands for reinforcements or undue extension is to be deprecated however. Our position is strategically a sound one, and we cannot at present afford to take risks by extending it unduly. In Mesopotamia a safe game must be played.

9. This policy was endorsed by a telegram from Mr. Chamberlain, who had on May 27th succeeded Lord Crewe as Secretary of State for India. The relations of the Cabinet to the officers in the field were further defined in a telegram on May 23rd already alluded to, in which the Secretary of State, while sanctioning the advance to Amara, added :

Under present circumstances only the Cabinet should decide questions jointly affecting civil and military policy.

10. On October 4th, in accordance with that policy, the Secretary of State sent two telegrams to the Viceroy, one private and one official, which ran as follows :—

Private. Sir J. Nixon's plans. Please refer to my official telegram of to-day on this subject. Your private letter of the 10th ultimo seems to render it imperative to stop the further advance of General Nixon's force. If you will communicate to me your views early I shall be grateful.

and :—

Will you kindly inform me what General Nixon's present intentions are, as, if on account of navigation troubles there is no probability of the retreating enemy being caught up and smashed, there is no object in the pursuit being continued.

The latter telegram was repeated to General Nixon from India in a telegram dated October 5th, which also stated :—

" At present no reinforcements can be spared from this country, so that unless arrangements can be made by the Secretary of State for the despatch of an Indian Division from France an advance on Baghdad cannot be carried out. Under these circumstances there seems to be no advantage in concentrating at present so far forward as Aziziyeh as the only gain in this is if a move toward Baghdad takes place. Commander-in-Chief considers that no advance in strength should be carried out beyond Kut-al-Amara until it is certain (and this appears to us very doubtful), that the reinforcements from France may be expected.

Finally on October 6th, the Viceroy sent the following telegram to the Secretary of State : —

" Orders to stop further advance were telegraphed yesterday to General Nixon."

Thus the plan of an immediate advance on Baghdad was apparently abandoned ; and that this was the belief at the front in Mesopotamia is evident from the following Divisional Order issued by General Townshend on October 11th, 1915 :—

The General Officer Commanding 6th Division wishes to tender his grateful thanks to all ranks of the division for the gallant and noble spirit in which they have advanced some 180 miles from Amara, defeated the enemy in an extremely strong position, and moved on another 50 miles or so in pursuit.

That we did not catch the retreating Turks is due to the fact of the shallow water of the river, and to the fact that the Turks are endowed by nature with strong knees.

He wishes he could have announced to the troops the end of their labours in Mesopotamia, but these operations naturally depend on those operations now being carried out in the Dardanelles, whence we now hope for good news.

He desires to tell the troops that orders have been received from Government in England that we are, for the present, to hold the position we have gained and thus our present orders are not to advance to Baghdad. It is the intention, therefore, of the G.O.C. to make the force as comfortable as it is possible to do under the circumstances ; tents, &c., will be brought up as soon as possible.

(Signed) R. G. PEEL,
Colonel, General Staff.

11. Meanwhile on October 4th the Cabinet met, and the Secretary of State reported the position to them, and the opinion of the Cabinet was conveyed to the Viceroy on October 5th in the following terms :—

The position was reported yesterday to the Cabinet, and they have decided to appoint a committee of Foreign Office, General Staff, Admiralty, and India Office, to consider in all its possibilities and policy advance on Baghdad.

If forces available are sufficient to take and hold the place, political reasons were thought to make occupation desirable. . . . It is thought by Barrow that we might be able to capture Baghdad, but that forces weakened by further losses would be insufficient both to hold it securely against counter-attacks and to maintain communication. Kitchener can hold out no hope of reinforcements from Europe or Egypt.

12. On the following day, October 5th, General Nixon replied to the Secretary of State's telegram of October 4th, as to " navigation troubles " in the following terms :—

By marching the troops with land transport and by lightening the vessels and employing them to tow loaded barges, we have overcome the difficulties of navigation . . . . . .

The view I take is that before us lies an enemy who has been shaken, who is short of ammunition and has lost 13 guns, and while we have the chance it is obviously profitable for military reasons to overwhelm him I hope I can destroy him, as the position in which he has taken refuge is one where we are able to manœuvre.

Should we let such an opportunity slip by us, I can see no arguments by which we could justify ourselves.

As will be subsequently seen, misunderstanding arose about the first sentence of this telegram. It was understood to affirm a general sufficiency of transport, but it really only answered the Viceroy's telegram of October 4th,* relating to the immediate local difficulties of navigation.

In a private telegram of the same day, the Viceroy stated :—

The following is the present situation :—

With the forces at his disposal General Nixon could, without much difficulty, capture Baghdad, and at the same time take or destroy the Turkish steamers and other boats thus practically preventing any further attacks down stream. But without himself being reinforced by one Division of troops he could not remain there exposed to attack by Turkish reinforcements from Mosul or Aleppo. To advance to Baghdad and to retire later, under pressure from the Turks, would be a grave error. Consequently Nixon must remain at Kut-el-Amara unless it be possible to reinforce him from elsewhere other than from India.

On the 7th, a telegram from the Viceroy stated that the Commander-in-Chief in India agreed that it would be unwise to occupy Baghdad with the present forces.

As regards this telegram, Sir Beauchamp Duff informed us that the telegram which he proposed to send was couched in somewhat different terms, and ran as follows : —

I have consulted the Commander-in-Chief, who has no doubt that as things stand at present we could capture Baghdad, but that our available troops would not be sufficient to hold it should the Turks mass troops for a counter-attack and that the effect of entering Baghdad and subsequently having to retire would be disastrous Moreover, he doubts whether in the present state of the river, combined with our present

* See para. 10 *ante*. This telegram was communicated to General Nixon.

insufficient number of light-draught steamers, we could adequately supply our troops there. As a military operation, therefore, he holds that to occupy Baghdad with our present forces would be most unwise.

(Then follow various reasons in justification of this contention.)

The Viceroy did not accept this telegram, and in his reply omitted all allusion to the Commander-in-Chief's doubts as regards the sufficiency of existing river transport, which doubts therefore were unknown to the Home Authorities.

13. On October 8th, the Secretary of State addressed the following question to General Nixon : –

Very urgent. To both occupy and hold Baghdad what addition to your present force are you confident will be necessary ?

and on the 8th the Secretary of State sent the following telegram to the Viceroy : —

Private. The Cabinet are so impressed with great political and military advantages of occupation of Baghdad that every effort will be made by us to supply the force that is necessary. We do not wish to attempt it with insufficient forces. I shall be glad to know whether you are satisfied that one division will suffice.

On the same day General Nixon telegraphed as follows : " No additions are necessary to my present force to beat Nur-ed-din and occupy Baghdad ; of this I am confident," but he added that he would require an additional division and one cavalry regiment to enable him permanently to occupy Baghdad.

14. On October 9th, in a telegram, the Secretary of State stated to the Viceroy :—

Private. I hope in a few days to give you definite information as to possibility of reinforcements. Meanwhile Nixon should maintain his present position and he should be prepared to advance if reinforcements asked for can be sent to him. I should be glad if you would instruct him accordingly.

On the same day the Viceroy in a telegram to the Secretary of State states as follows :

Private. I am glad of the Cabinet's decision. After consultation with Sir B. Duff, I am of the opinion that Sir John Nixon is in the best position to judge as to the number of troops that will be required, and when a division is mentioned by him we understand him to mean a division fully organised with its proper proportion of British troops and guns and its divisional cavalry. He asks for a cavalry regiment in addition to this.

We are prepared to accept his opinion, but we consider that it will also be necessary to ensure that the British units now with him are to be kept up to strength by drafts from England, and these cannot be supplied by this country. The Indian units will be kept at full strength by us. We may add that the reinforcing troops should reach Baghdad not later than one month after the capture of that city, and this is the period which we calculate must elapse before the Turks could concentrate in strength to attempt its recapture.

15. On the 14th, the Secretary of State telegraphed to the Viceroy :—

Private. Reinforcements for Force " D." A question has been raised as to the sufficiency of the reinforcements which General Nixon has asked for, or even of two divisions to hold Baghdad against forces which might eventually be brought against him by the Turks. The General Staff are now considering this, and the Cabinet hope to be given their report in three days.

We continue to attach the greatest importance to the capture of Baghdad if we can hold it securely. Please let me know whether the chances of eventual successful advance are prejudiced by delay.

to which the Viceroy replied :—

Private. With reference to your private wire, regarding Baghdad, dated October 14th. Unless Baghdad is strongly reinforced by the Turks in the meantime, and of this we see no immediate signs, the chances of eventual successful advance will not be prejudiced by delay, although owing to the longer time the enemy will have at their disposal for completing their defences the step will be more costly.

16. On the 15th, the Secretary of State telegraphed to Viceroy :—

Private. Advance on Baghdad. If report of the General Staff is favourable to occupation of Baghdad, the War Office contemplate transfer of the two Indian Infantry divisions from France to Egypt with the intention of placing them at your disposal for Mesopotamia. But they cannot guarantee date of departure owing to uncertainty of position in Near East and possible need of transport for other purposes. They do not consider it would be safe under the circumstances for Nixon to advance to Baghdad before these troops have actually started from Egypt unless you can undertake to supply him temporarily with a division from India in the event of these reinforcements being unavoidably delayed. I request early reply as to the possibility of your undertaking the liability.

This is in continuation of my private telegram of October 14th.

17. On October 17th, the Viceroy telegraphed :—

After consultation with the Commander-in-Chief, we agree that in no case could I undertake to supply from India, even temporarily, a further force of the strength of a division.

On the 21st the Commander-in-Chief and Viceroy in a full and reasoned telegram marked " Private," discussed alternative courses of action and gave their opinion in favour of the plan of taking and occupying Baghdad. This, they stated, would present no difficulty whatever provided they were guaranteed reinforcements of a full division of troops reaching Mesopotamia in two months.

18. On the 21st October the Secretary of State telegraphed to the Viceroy, as follows: —

Private. Baghdad advance. Report of combined Staffs estimates that General Nixon has only some 9,000 Turkish troops and some irregulars to deal with for next two months; that Turkish forces may be somewhat increased by the end of the year, and they might conceivably reach a total of 60,000 by end of January, and even larger figures during 1916. They consider if reinforced by two Indian Divisions from France he might, with assistance of river flotilla, face risk of attack by 60,000, but there would remain possibility of enemy receiving at later date further reinforcements. The staffs hold, therefore, that from a military point of view it would be unwise to occupy Baghdad unless military authorities have power to withdraw troops at once without regard to political considerations if military exigencies make this necessary. The War Office would give the two Indian Divisions, but could not under any circumstances spare further reinforcements, and are doubtful of their capacity even to supply drafts if wastage from casualties or sickness is severe. They think Baghdad can be easily taken and held for some time, but it might become untenable later as explained above. At present moment it seems the German attempt to break through to Constantinople will succeed, and our position and prospects in Gallipoli are most uncertain. . . . Arabs are wavering, and will probably join Turks, unless we can offer them great inducement. We are therefore, in great need of striking success in the East. . . . It is suggested that we should occupy Baghdad, giving assurances to Arab leaders that we favour creation of Arab State independent of Turks. . . . Unless you consider possibility of eventual withdrawal is decisive against the advance, all other considerations seem to us to render it desirable, and we are prepared to order it.

On the 23rd October the Viceroy replied :—

Private. Your private telegram of the 21st instant. Baghdad advance. Your description of the situation in the Near East proves conclusively the necessity for action in the Middle East. We accept the calculation of the combined Staffs of possible strength of Turks that may with time be brought against us; but with reinforcement of two Indian divisions from France we believe that Sir J. Nixon has a fair prospect of being able to hold his own against 60,000 or 70,000 Turks, provided he occupied Baghdad as soon as he is ready. Although I realise that the occupation of Baghdad is a provocation that will probably determine the Turks to send large forces to attack us, which however, will not be easy for them to do, and although the bad effect of a possible withdrawal in the future cannot be ignored, I am confident right policy at the present time is to take the risk and to occupy Baghdad with the least possible delay, relying upon you to send two divisions from France as quickly as possible to Mesopotamia. On this understanding I propose, unless I hear from you before Monday to the contrary, to order Nixon to march on Baghdad at once.

Finally, on the 23rd October, the Secretary of State sent the following telegram :—

If Nixon is satisfied that the force he has available is sufficient for the operation, he may march on Baghdad. Two divisions will be sent to him as soon as possible, but owing to relief and transport arrangements, reinforcements will take time to despatch. Probable date will be (? wired) later.

19. During the period of three weeks covered by these telegrams a number of meetings had been held, and memoranda written by the Military Advisers of the Government in London. These papers and consultations were less concerned with the taking of Baghdad than with the question whether it would be possible to hold it after it had been taken. On October 4th, General Barrow, the Military Secretary, India Office, had written a memorandum in which he expressed the opinion that to attempt to go to Baghdad with the present force was to incur unjustifiable risk.

On October 6th, the General Staff, in a memorandum, stated that to hold Baghdad, except with forces very much larger than at present with Sir John Nixon, and with proportionately increased river transport, would be to court disasters. 60,000 Turks could be assembled and conveyed within a few weeks to Baghdad, and to withdraw from Baghdad after occupation would have a most unfortunate effect.

On October 14th, another paper was drawn up by the General Staff on the question of occupying Baghdad. They estimated that if Baghdad was to be taken and occupied, General Nixon must have reinforcements of two Indian divisions. On the 19th the joint Naval and Military General Staff further considered the question, and came to the conclusion that if there were very strong political objections to a withdrawal from Baghdad then its occupation should not be attempted.

On October 16th General Barrow, the Military Secretary, India Office, modified his previous proposals by stating that if he had a firm promise of two divisions, he was entirely in favour of going to Baghdad.

20. Expert opinion was therefore unanimous on the point that to attempt to take and occupy Baghdad with the existing force would be an unjustifiable risk, and that for the task of holding Baghdad, General Nixon should have a reinforcement of two divisions. There was, however, a concurrence of expert opinion that Nixon's existing force was sufficient in the first instance to take Baghdad.

21. In addition to the ordinary Military Authorities with whom questions of this kind

are discussed by the Government, the Prime Minister summoned a special Inter-Departmental Committee, composed of members of the India Office, the War Office, the Admiralty and the Foreign Office, to which he submitted certain questions on the subject of the strategical situation in Mesopotamia. Mr. Chamberlain, Secretary of State for India, had some doubts as to whether he or Sir Thomas Holderness should be Chairman of this Committee, but he finally decided in favour of Sir Thomas Holderness in the belief that the other members of the Committee would more freely express their opinions before an Under-Secretary than a Secretary of State. Sir Thomas Holderness, though a distinguished civilian, had no special experience or training in the class of questions submitted to the Committee. The other members of the Committee were :—

Sir Edmund Barrow, Military Secretary, India Office.
Vice-Admiral Sir Douglas Gamble, Admiralty.
Sir Louis Mallet, Foreign Office.
Mr. Launcelot Oliphant, Foreign Office.
Colonel Talbot, War Office.
Captain Paddon, War Office.

22. The case was one of such high importance that, in our opinion, the Representatives of the War Office and the Admiralty on the Committee should have been officers of official position and experience more nearly on a par with those of Sir E. Barrow, who was the Senior General of the Indian Army and also Head of the Military Department of the India Office. During their discussions, the question of transport, as we ascertained from Sir Thomas Holderness, became quite a subsidiary subject. There were three communications from Mesopotamia—one contained in a despatch and memorandum, dated 10th July, 1915, and two in telegrams dated respectively 25th September, 1915, and 9th October,* 1915, which unmistakably expressed the inadequacy of the river transport even for the wants of the existing force of two divisions. These documents, though received at the India Office, were either unknown to the Committee or, if they were brought before them, were not seriously considered. Sir Thomas Holderness told us that his apprehensions as regards transport were largely removed by General Nixon's telegram of the 5th October,† stating that " by marching the troops with land transport and by lightening the vessels and employing them to tow loaded barges, we have overcome the difficulties of navigation." He did not appreciate the limitations of this assurance, and thought it applied to the general question of adequate river transport. After discussing the definite questions put to them, Sir Thomas Holderness's Committee came to the conclusion that, on both political and military grounds, the occupation of Baghdad was most desirable if the necessary reinforcements could be assured. Failing these, General Nixon was not to attempt it.

23. It was the promise of reinforcements that alone induced this Committee to advocate an advance to Baghdad, but, as in the case of the other authorities consulted, they apparently passed over the all-important problem of how these reinforcements, after arrival at Basra, were to be conveyed as fighting units to the front, a distance of some 500 miles. We lay stress upon this serious omission, especially in the case of the Committee presided over by Sir Thomas Holderness. The despatch of troops from France or Egypt could not affect any fighting around Baghdad after its capture, unless, after their arrival in Mesopotamia, they were conveyed as an organised force to the scene of action. The arrival of troops at Basra, without transport or their proper medical complement, with their Headquarter Staff scattered and disorganised and without the means of conveyance up the river, was not a reinforcement in the sense defined by the Viceroy in his private telegram of the 9th of October, in which he thus expressed himself :—

> We may add that the reinforcing troops should reach Baghdad not later than one month after the capture of that city, and this is the period which we calculate must elapse before the Turks could concentrate in strength to attempt its recapture.

24. It seems to us that it should have been a primary duty of the Military Advisers of the Government, both in India and in England, to have thoroughly investigated the conditions attending the dispatch of troops from Europe and Egypt and their transport up the Tigris, so as to be sure that they could perform the functions assigned to them of being a fighting addition to the advance columns located in Baghdad.

In this connection it should be noted that Sir Beauchamp Duff, in his examination before the Commission placed the same interpretation as did Sir Thomas Holderness, upon the telegram of General Nixon of the 5th† of October, in which he used the words: "We have overcome the difficulties of Navigation."

* See Part IX., paras. 8 and 10. † See paragraph 12, *ante*.

Sir Percy Lake, who at the time this telegram was received at Simla was Chief of the General Staff, did not accept Sir Beauchamp Duff's interpretation of the meaning of this telegram, and he told us so in his evidence. General Kemball, who, as Chief of Sir John Nixon's Staff in Mesopotamia, had sent the telegram, emphatically repudiated Sir Beauchamp's reading of it.

A reference to the telegraphic correspondence, makes it self-evident that General Nixon's reply referred to the delay caused to the pursuing river column by shoals and shifting banks, as reported by General Nixon to the Secretary of State on October the 1st. It in no sense counteracted or modified his previous statement that his transport was inadequate. Indeed, only four days later, on October 9th, he asked, as an urgent need, for more river craft to be procured from India and indicated that his operations were very seriously impeded by the insufficiency of his existing river craft.

25. The warning conveyed in a private telegram of October 21st* from the Secretary of State to the Viceroy of a possible concentration of 60,000 Turks at Baghdad in January, 1916, was acknowledged by the Viceroy in a private and reasoned telegram accepting the risk. The information thus conveyed introduced a new factor into the situation, and one which ought at once to have been forwarded to Sir John Nixon. Sir John Nixon in his evidence before us could not recollect receiving this information, and Sir Beauchamp Duff has informed us that this telegram was not transmitted to Mesopotamia. He accounted for this oversight by the fact that it was a private telegram to the Viceroy of which he had no official cognisance, nor was it filed in his Department. Sir John, however, intimated that if he had been warned in time he could have stopped the advance to Baghdad even on November 17th, *i.e.* a month later than this telegram. On that day, *i.e.* four days before the battle of Ctesiphon, the War Office telegraphed from London to General Nixon that General von der Goltz had left for Baghdad on November 10th, and that 30,000 Turks were marching from Anatolia to Irak. On the 20th General Nixon replied :—

> For more than a fortnight my own agents have been giving me similar news of a large force under Von der Goltz, but at present I do not accept these reports as conclusive for various reasons.

Sir John Nixon's over-confidence in his ability to crush the Turkish forces between him and Baghdad might have induced him in October to ignore the warning from London as to the large enemy reinforcements which might be brought down to Baghdad. Still, the neglect to convey to him so vital a piece of information reflects seriously on the system which allowed such inadvertence to be possible. If the substance of this important telegram had been conveyed to the Viceroy in an official instead of a private telegram, it would, as a matter of course, have been transmitted to Mesopotamia.

26. In alluding to the introduction by the Cabinet of political considerations into the consultations of their military advisers, we do not wish to imply that this widening of their survey is to be condemned or that it necessarily subjects those so acting to criticism or censure. In a world-wide war the views, wants and aims of allies must be considered and weighed, and operations may become necessary for the continuance and consolidation of existing alliances and of the co-operation which such alliance ensures. But when such considerations do obtrude themselves into a military campaign the incidence of responsibility tends to shift itself. The military experts cannot be made solely responsible for the consequences of a decision into the consideration of which outside political factors have necessarily entered.† Sir Beauchamp Duff in part of his evidence laid stress upon the introduction of outside political considerations into the conduct of the campaign, and he stated that when such political arguments were adduced by those above him in authority, he was ready to incur greater risks than would be justifiable if the matters under discussion were to be regarded solely from a military standpoint.

27. In the decision arrived at by the Home Authorities, they were doubtless largely influenced by the extreme confidence of those on the spot. There seems to have been a general idea—not only amongst the Headquarter Staff of General Nixon, but also amongst the Commander-in-Chief's Staff in India—that there would not be any serious fighting before Baghdad was reached. Even amongst the General Staff at Whitehall, the idea prevailed that the difficulty was not to get to Baghdad but to remain there. The retreating Turks were supposed to be thoroughly demoralised, and insufficient attention was paid to the warnings of the War Office Intelligence Department that a very large number of

* See paragraph 18, *ante*.

† See Secretary of State's telegrams of October 5th, 8th, and 21st, in paras. 11, 13, and, 18 *ante*.

Turkish reinforcements would shortly be concentrated at Baghdad. It might also have been surmised that these reinforcements under Marshal von der Goltz would be disciplined and trained under German officers and armed with the most modern equipment.

28. It is not very easy to fathom the interchange of views between General Townshend and General Kemball, Chief of the Staff to Sir John Nixon, as to the advisability of an advance to Baghdad. On October 3rd an important telegram was sent by General Townshend to General Kemball. Sir John Nixon states that he does not remember seeing it, but it is surprising if he did not. It certainly should not have been dealt with without reference to him, and in our opinion it should have been passed on to higher authorities. In it General Townshend says :—

> If on the other hand it is the desire of Government to occupy Baghdad, then, unless great risk is to be run, it is, in my opinion, absolutely necessary that the advance from Kut should be carried out methodically by two divisions or one Army Corps or by one Division supported closely by another complete Division, exclusive of the garrisons of the important places of Nasariyeh, Ahwaz, and Amara.

On the same day General Kemball answered this communication, and informed General Townshend that it was Sir John Nixon's intention " to open the way to Baghdad, as he understands another division will be sent here from France, and he would like to know your plan for effecting this object." General Townshend received this the same day, and noted on it in his diary : " There is nothing definite known about this, and no earthly chance of its being in this country in time." Nevertheless, in his answer, also dated October 3rd, he wires to General Kemball : " You did not mention the arrival of a division from France in this country, and that makes all the difference in my appreciation." These two statements are not easy to reconcile, but General Townshend, like many other born fighters, was somewhat mercurial and changeable in his views.

29. A fortnight later, on October 19th, General Kemball visited General Townshend on other business, and the above correspondence was discussed by them at this and at two subsequent interviews, viz., October 30th and November 5th. The matter is not quite clear, but General Kemball's opinion is that the reinforcements which General Townshend received *i.e.*, five squadrons of cavalry, three battalions of infantry, and a R.H.A. battery —were very much what he asked for, and there was also the promise of two divisions from France, the leading troops of which General Kemball expected to arrive at Basra at the end of November. Whether General Townshend was satisfied or not is not certain, but he does not seem to have pressed his objections hard.

But misgivings were present in his mind as late as November 2nd, for on that day he wrote to the Viceroy a letter in which these expressions occur :—

> These troops of mine are tired and their tails are not up, but slightly down ; the Mahomedans are not pleased at approaching the sacred precincts of Suliman Pak at Ctesiphon—the troops are not confident and have had enough ; as it is now, the British soldier and the Sepoy, as the Roman soldier did under Belisarius, look over their shoulders and are fearful of the distance from the sea, and go down, in consequence, with every imaginable disease.

These are not the words of a General commanding a force in the field who has confidence in the capacity of his troops to achieve the task assigned to them.

Apparently the Commander-in-Chief, Sir Beauchamp Duff, did not at the time see these communications from General Townshend, but if he had, we have his word for it that they would not have materially changed his views as to the wisdom of the advance. But General Townshend was an experienced and successful commander, and in our opinion his words were well worth weighing, especially in connection with an enterprise of which he was the selected chief.

30. It should be added that several months later, on April 7th, 1916, General Townshend sent in an amplification of his appreciation of October 3rd, which seems to have been in his mind when he wrote that appreciation. On April 7th, he said : " My opinion most certainly was that we were taking a grave risk in continuing a strategic movement against Baghdad with my weak Division alone, the British battalions of which were reduced to half their strength, and besides this the drafts to replace casualties at the battle of Kut consisted of raw recruits from India, while there were no other troops to support me, and the distance to the sea was over 300 miles." General Kemball in giving evidence before us did not accept these statements as to the condition of the troops. He regarded them as exaggerated.

That General Townshend's Division was much below its normal strength is we believe beyond dispute,* and moreover physically the troops were much debilitated by their previous strenuous exertions in the hot months of June, July, August and September.

* See Part VIII, para. 13.

31. Major Bastow, who was A.D.C. to General Townshend, and who in his examination before us had General Townshend's diaries to which to refer, told us that it was lack of suitable river transport which prevented General Townshend from smashing up the Turks after their defeat at Kut-el-Amara. General Townshend wished to retire when he found that he could not overtake the Turks before they reorganised at Ctesiphon. General Nixon subsequently ordered the 6th Division to concentrate at Aziziyeh. This concentration occurred a few days after General Nixon telegraphed that he could open the road to Baghdad. General Townshend's reluctance to advance, when he discovered that the enemy in front of him had reorganised, was due partly to his belief that his force was insufficient and tired, partly to the inadequacy of his transport which had already failed him, and partly to the great length of his line of communications. He was not informed before the Battle of Ctesiphon of the possible Turkish reinforcements which he might have to encounter.

Major Bastow further stated that General Delamain, one of General Townshend's Brigadiers who had commanded a brigade with great success from the commencement of the campaign, was of opinion that his brigade had already been tried enough in storming fortified trenches, and it was not fair to put them up again against such obstacles without adequate artillery preparation.

32. All the previous advances had been justified and advocated as defensive measures for the protection and consolidation of our existing position. The move on Baghdad was strictly offensive, and those authorising it, both civilians and military, do not seem to have realised sufficiently the change thus made in the character of the expedition nor the increased necessity of associating with that change the enlargement of the subsidiary services. Moreover, from its position at the head of the navigable tide-way, it was inevitable that Basra should remain the base of the expedition, and little, if anything, had been up to this date done to increase the discharging facilities of the port.

सत्यमेव जयते

1. The total force at the disposal of Sir John Nixon at the time the advance was made to Baghdad was only some two divisions or about 24,000 to 25,000 men. Of these there went up with General Townshend the Sixth Division, plus one Infantry Brigade and two and a half regiments of cavalry with a brigade and certain batteries of artillery, numbering in all from 15,000 to 17,000, according to the estimate of General Gorringe, who was at the time in command of the troops on the Lines of Communication. The remainder of the force, some 6,000 to 8,000 men, were left to guard the lines of communication and our positions on the Euphrates at Nasariyeh and on the Karun at Ahwaz. The line of communications from Basra to Baghdad via the River Tigris is 502 miles.

2. It will thus be seen that on General Gorringe's estimate, 75 per cent. of our total available force was required for the offensive. The remaining 25 per cent. were guarding the communications and rear positions and could not be looked upon as a reserve. The Turkish forces between Kut and Baghdad were believed to be about 9,000, and it was further assumed that they were considerably demoralised by a succession of defeats to which they had been subject.

3. Based upon these estimates, a spirit of intense optimism animated the Head, quarter and Administrative Staff. This is shown by their estimate of impending casualties, preparation being made for only 500 severely wounded. Two river steamers, the "Mosul" and the "Julnar," were put on one side to be temporarily fitted up by Surgeon-General Hathaway for the reception of wounded, the arrangements being that the more seriously wounded were to be moved down to Kut in these vessels and the more lightly wounded located in Baghdad. No apprehension of an effective repulse or of our inability to reach Baghdad seems to have been entertained by those directing the advance.

4. After some skirmishing, our advancing forces, consisting according to General Townshend of only some 11,000 effectives, were concentrated on the left bank of the Tigris at Laj. The enemy, estimated at 11,000 to 13,000 men, were entrenched a few miles up the river, their defences consisted of two strong lines of trenches, and between these two lines was the archway of Ctesiphon. General Townshend attacked this position on the morning of November 22nd, and after severe fighting he captured the first position, taking with it 1,300 prisoners. Our troops then penetrated the second line of trenches and captured eight guns. Here they were heavily attacked by Turkish reinforcements and forced back into the first line which they had previously captured. November 23rd was spent in reorganising these positions and collecting the wounded, and on the 24th and 25th prisoners and wounded were evacuated to Laj, where they were put in steamers and taken down stream.

5. In the meantime, the enemy was largely reinforced, and General Townshend found himself after his heavy casualties not only numerically very inferior to the enemy, but in some danger of being surrounded and cut off. He was also short of supplies. He retired during the night of November 25th to Laj, falling back further on the 27th to Aziziyeh. He there fought a rearguard action back to Umm-al-Tubal where several of his steamers grounded, and he had to remain there till December 1st, by which time they were refloated. A heavy attack by the Turks on the morning of the 1st was repulsed with great loss to the enemy, and, taking advantage of a successful counter-attack made by the cavalry brigade, General Townshend retired to Shadi, a distance of 30 miles, which place was reached on the same night. On December 3rd the troops, greatly exhausted, arrived at Kut-el-Amara. Our losses at and since the battle of Ctesiphon amounted to more than 690 killed and 3,800 wounded, a loss of over 30 per cent. of the total advancing force.

6. It has been alleged that the failure to reach Baghdad was in part due to the delays caused by the lengthy discussions as to whether the advance should take place or not. This may have been partly so; but if these discussions had been shorter than they were, the state of the transport would have prevented General Townshend from advancing much sooner than he did. After his victory at Kut-el-Amara, on September 28th, six weeks were spent in bringing up reinforcements and supplies, and his original plan of a rapid pursuit and following close on his enemies' heels into Baghdad soon proved impracticable.

The Turks had ample time to prepare a strong position at Ctesiphon; but had it not been for the reinforcements which reached them before our attack took place, it appears clear that they would have been defeated. The British Force had the utmost confidence in their leader, and the manner in which they fought did not indicate any loss of *moral*.

7. Notwithstanding the deficiencies of medical equipment and of transport, all the wounded were evacuated and all the prisoners were taken to Kut. This was a remarkable military achievement, carried out during a hazardous retreat against overwhelming odds and with lines of communication threatened and at times cut by marauding Arabs. Great credit is due to the medical officers for their devoted work in thus evacuating their wounded, but many of those so moved suffered terribly, as the two prepared steamers could only accommodate* a small proportion of them. (Later on we will particularise the nature of these sufferings.) The remainder had to be put in any craft that was available and so hurriedly that, as on other occasions when vessels carrying up animals were utilised, there was not time to clear them of their accumulation of filth and dung. General Townshend and his force in these exceptionally trying circumstances fully maintained their previous splendid reputation, and if for the first time defeat instead of victory attended their efforts, this was due to the exceptional difficulty of the military task imposed upon them, for the numerical odds and adverse conditions with which they had to contend were too much even for their fighting superiority.

8. After full consideration, Sir John Nixon and General Townshend agreed that Kut should be held by General Townshend and that his relief should be effected as quickly as was possible with the reinforcements on the way from France and elsewhere. This decision received the assent both of Simla and Whitehall. The sick, wounded, and prisoners were evacuated and sent downstream to Basra. On the 6th December the Cavalry Brigade left Kut, and on the 7th the Turkish investment of that place was complete.

* See Part X., paras. 23 26 and 57–61.

सत्यमेव जयते

1. After the retreat from Ctesiphon, General Nixon returned to Basra to organise a force for the relief of Kut. He was in bad health at the time, and his ailments so grew upon him that in the subsequent month he was invalided home. Sir Percy Lake, the Chief of the General Staff in India, was appointed in his place, and took over the command on January 18th, 1916.

Sir John Nixon, upon his arrival at Basra in December, had at once ordered the 28th Infantry Brigade to strengthen the 6th Cavalry Brigade at Ali Gharbi. In anticipation of the arrival of the two divisions from oversea, Sir Fenton Aylmer, Adjutant-General of the Indian Army, was sent to take command of a force designated as the "Tigris Corps," in which were to be incorporated the two expected divisions, the troops located at Ali Gharbi and ultimately other reinforcements. The two Divisions, the bulk of which was still on the high seas, were gradually arriving at Basra, but their piece-meal embarkation and disembarkation were very detrimental to their efficiency as fighting units; their whole organisation was upset by the methods of their transmission and disembarkation, and there was no time for their proper re-organisation before advancing. The available transport in Mesopotamia was not sufficient even to carry the men and ammunition to the front, and it was in these disadvantageous circumstances that the military operations were commenced.

2. The history of the attempts to relieve Kut is melancholy reading enough—a record of a prolonged struggle carried on with inadequate means under abnormal conditions of atrocious weather, and terminating in failure.

3. The task which confronted General Aylmer, the General Officer commanding the relieving force, meant in most cases an advance over ground deep in mud and devoid of cover. Moreover, as a rule the position of the enemy made frontal attacks inevitable against trenches held by Turks whose tenacity on the defensive is proverbial.

His army had been hastily got together—there are numerous complaints about "scratch" staffs, and the equipment, especially in heavy artillery, was far below what was required. A large proportion of the reinforcements at Basra were unable to join the Army at the front through lack of transport. It therefore seemed all-important to wait until his army had been properly organised and deficiencies made good.

4. But before such reorganisation was possible an early start was made, and it is to this that the unfortunate result was mainly due. The reasons which thus precipitated matters are to be found in a succession of telegrams which General Townshend despatched from Kut during December. In these he urges, as reasons for his immediate relief, the dangers of enemy reinforcements and of a determined onslaught by superior numbers, the impaired *moral* of his troops, heavy losses in British officers, anxiety as to ammunition, etc., etc. But it is noteworthy that throughout this month he never, except on December 5th, puts forward deficiency of supplies as a reason for accelerating his relief. On December 5th, he wired, "I hope we can be relieved by a month, my rations for British troops are only one month, and 55 days Indian troops. I shall have to reduce a scale of rations, and commandeer all bazaar supplies." This estimate was, however, corrected two days later, by a telegram of December 7th, in which he says that he has 60 days' rations for both Indian and British troops, *i.e.*, enough to carry them on until the beginning of February. After this telegram of December 7th, the question of food and rations is never even mentioned by General Townshend until January 16th, *i.e.*, after the first attempt at relief had failed. As General Townshend is still a prisoner we have been unable to hear his explanation on this.

5. It is strange that neither General Nixon nor General Aylmer seem to have thought of definitely asking General Townshend how long his supplies would permit him to hold out; nor did General Townshend himself definitely ascertain this most important fact till several weeks after he was shut up in Kut. No doubt he had received positive assurances that he would be relieved within two months at the outside, and as he was satisfied that his supplies would easily last for that period, he did not attach so much importance to the food factor as he ought to have done. However this may be, telegrams from General Aylmer on January 25th, and General Lake on the 29th indicate that the neglect of General Townshend to intimate his true position as regards supplies was one of the main factors in the hurried advance; although it appears that the Assistant Director of Supplies in Kut, had ascertained on December 11th, that there were *full rations* in many essentials for 70 days, and large additional stocks were discovered later on.*

* See Appendix III., para. 117.

6. General Townshend arrived at Kut on December 3rd ,where, for what seem to be sufficient reasons, he determined to remain, and in this resolve he was supported by Sir John Nixon and by India. The Turks closed in on him on the 7th, and at first the assaults were numerous and severe, especially about Christmas, when there were three days' fighting, which terminated in the enemy being repulsed with such heavy losses that no serious attempts to storm were made for the remainder of the siege.

There was, however, plenty of shelling and sniping; but the real enemy was starvation, and it was this that compelled the surrender of the place on April 29th, 1916, after a most gallant and tenacious defence of 147 days.

7. This disaster would have been averted for a long time if the Arab population, about 6,000, had been expelled before the investment began. Sir P. Cox, the political adviser, was averse to such a measure, as he was unwilling to hand them over to the tender mercies of the Turks and hostile Arabs, but their retention undoubtedly added to the difficulties of supply.

8. The Tigris Army Corps, as the relief force was called, had been reinforced by two divisions which had taken part and been severely punished in the murderous fighting in France. In some quarters there was an impression that their *moral* had been impaired by the trench conditions of warfare prevailing there, and that they were not so ready to face the open as they might have been. However, we are of opinion that their conduct, under the very arduous conditions which prevailed in Mesopotamia, does not lay them open to this charge, and their heavy losses during the operations show how stoutly they fought.

9. It is not proposed to go at all thoroughly into the actions fought in the course of these operations. That would involve the study of strategic and tactical considerations which had better be left to the experts to whom the history of the war will be entrusted, when criticism will be easier than it is now. An exception is made in the case of the attempt to take the Dujailah Redoubt at the battle of Es-Sinn (March 8th, 1916), and to a certain extent in the case of the battle of Sanaiyat (April 6th and 8th, 1916), as the results were exceptionally unfortunate and perhaps decisive so far as the relief of Kut was concerned. We are indebted to our colleague, General the Hon. Sir N. Lyttelton, G.C.B., for the ensuing analysis of these two engagements which in our opinion is justified by the evidence placed before us.

10. The advance from Ali Gharbi took place on January 4th, 1915. Fighting of a severe description soon began. On January 6th, General Younghusband was heavily engaged on both banks of the River Tigris, and held his ground with difficulty. On reinforcements coming up, the attack met with some measure of success on the right bank, where the Turks were driven out of their entrenchments, and fell back from Sheikh Saad to a new position on the Wadi, 10 miles up stream. On the 9th this position was also forced, and the Turks again retreated 5 miles further to Hannah. These successes were dearly bought, the losses amounting to nearly 6,000. The next attack, on the Hannah position, January 21st, failed with considerable losses, 2,741, and for some time no very serious fighting took place. General Aylmer blames General Younghusband for not following his directions on January 4th, which were not to commit himself, but merely to hold the enemy. General Younghusband admits receiving the order, and says he advanced and "felt the enemy hard on both banks," which does not seem to have been quite in keeping with the order. General Aylmer says "he felt them too hard," and this seems to be true. General Aylmer also says that he fought the action on the Wadi against his better judgment, acting under superior order, and that he had proposed another plan of attack, which was not accepted by Headquarters. This seems to have been the case, and further it was clear that the hard fighting and heavy losses had told on the men. Moreover, there was a shortage of artillery ammunition.

11. The first attempts having thus failed, General Aylmer determined in March on another plan. An important keypoint was the Dujailah Redoubt, about the right centre of the Turkish lines. General Gorringe, Chief of the Staff, Tigris Corps, told us that it had been ascertained that owing to an insufficient water-supply this fort was very lightly held, the bulk of the troops told off for its defence having to camp on the bank of the river four or five miles off. Consequently it was hoped that by a night march a superior force could be moved across the Turkish front so as to arrive by daybreak near the redoubt and carry it by assault before the reinforcements could arrive. On the face of it the idea seemed practicable and sound; all depended on the element of surprise, and this could only be attained by strict punctuality. Let us see how the scheme worked out It must be

added that General Aylmer told us he knew nothing of the short water-supply and consequent weakness of the garrison—a bewildering statement in view of General Gorringe's evidence on this point.

12. A night march is far from being an easy operation at any time. The difficulties vary with the nature of the ground, the distance to be traversed, and the number of troops engaged. It requires good march discipline and first-rate staff work, especially when, as in this case, an attack is to follow immediately. To General Kemball was entrusted the task of turning the flank to be attacked in co-operation with a column on his right.

13. In a statement submitted by him to us General Kemball calls attention to the well-known night march in 1882 when a British force under Lord Wolseley successfully stormed the Egyptian entrenched camp at Tel-el-Kebir. On that occasion 13,000 men had to march about 3½ miles over easy ground, and for this Lord Wolseley allowed 3½ hours. In the official account of the campaign we read: " . . . from previous experience it was calculated that, making all allowances for delays, etc., during the night, the actual rate of progress . . . would be a mile per hour," and this proved exactly correct. There were 48 guns, but no other impedimenta worth mentioning.

14. At Es-Sinn the ground was also on the whole favourable, but other conditions widely differed. Nearly 20,000 men, with all sorts of impedimenta, transport, ambulances, animals, etc., had to march distances varying between 12 and 16 miles. Some of the troops had been on the move the night before, many had to march 1 or 2 miles from their bivouacs to the rendezvous, the artillery 5 or 6. A margin of one hour was allowed for unforeseen delays such as may occur in any night march.

15. The troops had to be concentrated at 8.30 p.m. on March 7th, in time to start at 9 p.m. and reach their objective by dawn, about 5.45 a.m.

In one very important particular Lord Wolseley had a marked advantage. His small army was entirely composed of well-trained British troops with a most efficient Staff. General Aylmer's force was heterogeneous, British and Indian troops being mixed up together, and he and other Generals make many complaints of the " scrappy " character of their Staffs. This army was expected to march about 14 miles in rather less than nine hours.

The uncertainties of a night march were speedily revealed. Many of the troops were late at the rendezvous, and the start did not take place till 10.22. Thus more than the one hour margin allowed was lost before the start. A second hour was lost through a division missing its way; the men were so weary that they fell dead asleep at the halts, and were with difficulty roused. Other delays occurred, and the result was that General Kemball's column, which had the farthest to go, instead of being at the point Z, where it was to deploy for attack, at 5.30 a.m., was still 1,500 yards short of it at 6.30, when it was broad daylight. This of course was fatal to the success of the operation so far as surprise was concerned.

16. General Gorringe holds that in spite of this, energetic and bold action on the part of General Kemball would still have forestalled the enemy in his attempts to reinforce Dujailah. General Kemball's excuse is that he received no proper support till late in the afternoon. He adds that when the enemy's weakness in the redoubt was discovered, Column C on his right should have been put in, in spite of Column A's late arrival. If Headquarters were correct in their assumption that there was only a small garrison in Dujailah, a long flank march was unnecessary, and a direct attack might have been made from Point Y, where the columns bifurcated.

17. It is pointed out by General Kemball that General Gorringe's statement that everything went well up to the time the columns separated (at point Y) is quite incorrect; they were 2½ hours late there. General Kemball also takes exception to other assertions of General Gorringe.

18. There is a good deal of technical evidence as to the proper formations for the march and the tactical dispositions for the fighting on the 9th March, and Generals Aylmer and Gorringe attribute great blame to General Kemball in these respects, and to a certain extent they are supported by General Lake, G.O.C. " D " Force. It is not our province to go exhaustively into these points; they are detailed at length in their evidence and statements, to which reference can be made. We may, however, point out that in a night march which is to be followed immediately by an assault, it is obvious that the troops should march in such a formation as to enable them to attack with the least possible delay when

the objective is reached. That was Lord Wolseley's intention at Tel-el-Kebir—to arrange the troops in such order that it should require no manœuvring to pass from the formation of march to the formation of attack, but although this intention was not fully carried out and the Divisional Commanders did not adopt the same formation, there was no serious difference, and the spirit of the Commander-in-Chief's order was not infringed. Lord Wolseley allowed more latitude to his Divisional Commanders than General Kemball enjoyed. Whether any such formation in a night march is possible under modern conditions is hard to imagine. We conceive that the question for us is whether the night march under the conditions already described offered a reasonable prospect of success.

19. General Aylmer himself admits that the march was a close run—that an hour's margin was scanty; but owing to the necessities of the situation he could not spare more, and that the plan of attack he adopted was the only one he could think of as likely to succeed. Our opinion is that the chances of A Column being up to time were slender; that the operation, to use a term that has cropped up elsewhere, was of the nature of a "gamble" in which the odds against success were high, but whether they were too high to justify the action taken cannot be stated in terms of certainty.

20. There is another matter which demands attention—whether it was necessary to break off the fight on March 9th, as was done by General Aylmer's orders. General Kemball declares that the Turks had been retiring in the night and he reported this to Headquarters. However, the report was not credited. General Gorringe, in his despatch, says the aeroplane reconnaissance showed no signs of withdrawal, and it may be that it was only partial.

21. General Kemball said that in spite of their severe losses, he had full confidence in his men; that he had been in a much tighter place at Sheikh Saad and had come out successfully, and was anxious to try again. Headquarters did not accept this offer, and it can hardly be said that they were wrong. The other reason given for not renewing the attack was the deficiency of water. General Kemball asserts that there was plenty where he was, and very likely there was enough for his men, but it is not clear there was for the whole force. On the whole we do not see sufficient reasons for imputing blame to the Corps Headquarters for the action they took.

22. We have gone at length into this controversy because much depended on this battle, and because we think that the unfortunate result had so much to do with the final catastrophe of the fall of Kut; and for the same reason we propose to go with some minuteness into the details of the defeat at Sanaiyat, which followed not long after.

23. The battle of Sanaiyat was in two parts. The first, on April 5th, on both banks of the river, was highly successful, the 13th British Division, under General Maude, recently arrived from Egypt, particularly distinguishing itself by carrying five lines of entrenchments in succession. General Gorringe commends General Maude and all under his command for the brilliant success of this assault.

24. This fine piece of work was followed on the evening of the same day by another equally good, carried out by the same division, of which General Gorringe speaks in these terms: "The highest praise is due to General Maude and his Brigade Commanders and all under their command for this successful night attack, a difficult operation at all times, requiring great dash and good leadership as well as personal bravery among the junior commissioned and non-commissioned ranks." These eulogiums are quoted to justify the belief that this new army division would prove itself equal to any duty that might be imposed upon it. It should be added that it was not without experience of war; it had served in Gallipoli and suffered heavy losses there.

25. There was no time to be lost; the sands were running out at Kut, and the situation there was very critical. The river was rising, and more floods were to be expected, and no intermission in active operations was possible. On April 6th, at 1 a.m., the 7th Division attacked the left of the Sanaiyat position under very unfavourable conditions; they could not break through, and in the afternoon they were flooded out of their trenches. It was evident that no attack by day over such sticky and open ground could succeed, nor even at night unless the assaulting force could be assembled under cover within assaulting distance, so preparations were made for this to be done. These were completed by evening on the 8th and the 13th Division were again selected to assault, and they started at 4.20 a.m., the 9th.

26. At first it seemed as if the successes won on the 5th were going to be repeated. The leading lines, moving with great dash, penetrated into the centre of the enemy's

front-line trench without suffering heavily in doing so. Unfortunately the supporting lines failed to maintain the advantage thus won, they were driven back and the Turks retook their lost trenches.

27. General Gorringe considered Sanaiyat to be the key to the position, and that if this attack had succeeded the relief of Kut in all probability would have followed. It appears that no such favourable opportunity recurred.

There was great cause for anxiety in the state of the supplies of the relieving force. The Army was living from hand to mouth, a state of things to which the usual deficiency of transport largely contributed. Still all hope was not abandoned; the Army Commander, Sir Percy Lake, had come up, and under his instructions further attempts were made. The troops responded to the call, and continuous fighting went on till the 22nd. Occasional successes were gained, the 3rd Division accomplishing some good fighting; but hardly any real progress was made. The heavy floods made all movements most difficult, and the men at times could not even use their rifles, which were clogged with mud. After 16 days' continuous fighting, not only against the Turks, but against the floods, all hope of relieving Kut had to be given up. The losses had exceeded 33 per cent., and were even greater in British officers, and the fighting efficiency of the force was seriously affected.

28. Kut managed to hold out for another week; then the inevitable happened, and it surrendered after a most determined defence on April 29th. Right up to the end of the siege General Townshend and his brigadiers retained the confidence and allegiance of their men. One witness informed us that after the terms of surrender had been settled and the Generals were departing in a steamboat as prisoners of war, their men formed up along the riverside and gave them a parting cheer as a proof of their unbroken loyalty.

The extremities to which the garrison was reduced during their long-drawn agony are vividly depicted in Colonel Hehir's report and in General Townshend's telegrams from Kut. The difficulties in rationing the Indian troops were much enhanced by caste prejudices as to food. For a long time many of them refused to eat horse or mule flesh. Had it not been for this, these animals could not only have been used as food for the men, but the grain they consumed could have been devoted to the same purpose. It is doubtful, however, if this would have done more than prolong the agony. The relieving force was not strong enough in artillery, high-explosive shells, and other appliances, without which attacks on modern entrenchments seem absolutely futile.

Sir Percy Lake summarised the three main causes of failure as being—premature attacks, inadequate transport, and exceptionally unfavourable weather. We endorse these findings, but we add to it another, namely, insufficient numerical superiority over a strongly-entrenched enemy. This drawback may be included under the head of "inadequate transport," for during the whole of this period of critical fighting, large numbers of troops and many guns were at Basra quite unable, for lack of transport, to be conveyed and take part in the fighting.

29. As stated above, Force "D" was not a homogeneous body. For instance, in each Cavalry Brigade of three regiments one was British, in each Infantry Brigade of four battalions one was British, the remaining units being Indian with a small proportion of British officers. In many a hard-fought field these Indian soldiers proved themselves worthy of standing shoulder to shoulder with their British comrades.

This army had been put to a severe test, the 6th Division in particular. It had been almost continuously fighting or marching or moving by water for the best part of a year. It had been repeatedly short of supplies, and owing to its frequent movements had felt acutely the want of adequate water transport. Nevertheless it had performed feats of fighting and endurance of which any army might have been proud. The part of the advance called by the troops "Townshend's Regatta*" was an astounding piece of work.

It may be that the *moral* of the troops fell off to a certain degree, but in what army would this not have occurred after such ordeals as the battle of Ctesiphon, the defence of Kut, and the series of stubbornly contested actions fought by the Tigris Army under exceptionally unfavourable conditions in the vain efforts to relieve their beleaguered comrades in Kut? Whatever faults of organisation and equipment there may have been, no discredit attaches to the fighting men for the failures of the operations in Mesopotamia.

30. During the hot season after the fall of Kut, the army suffered much from sickness, and the transport and supply arrangements, though improving, were still inadequate. In

* See Part IV., para. 8.

April, 1916, the immediate policy to be followed in Mesopotamia had been clearly indicated by the Imperial General Staff. Briefly summarized it was as follows:

> At present our policy in Mesopotamia is defensive . . . Lake should . . . maintain as forward a position as can be made secure tactically, and be ready to take advantage of any weakening of the Turks on his front, so long as this can be effected without incurring heavy loss, whether caused by the enemy or by unhealthy conditions . . . His forces are superior to those of the enemy . . . he should, therefore, have no difficulty in carrying out the above policy until the Turks are strongly reinforced . . . he must be clearly shown that the security of his force is of primary importance.

These instructions were strictly adhered to during the summer and autumn, and Sir Percy Lake and his successor, Major-General Maude, confined themselves during this period to developing river and railway communications and the supply organisation, with very satisfactory results.

31. We have already pointed out that early in February, 1916, the War Office assumed control of the expedition. Later on, in July, 1916, all the administrative work in connection with the expedition was transferred to the War Office, and from that date they became solely responsible for the policy and management of the expedition. But the War Office have not, even under these arrangements, any control over Indian Military Establishments in the sense of being able to order reinforcements from India to Mesopotamia. We have not thought it desirable or necessary to make detailed investigation beyond the date of the operations which failed to relieve Kut. Since then new plans of campaign have been devised, and are in active operation. We have, however, satisfied ourselves that the transfer of the conduct of the expedition to the War Office had been most beneficial so far as the supplies and comfort of the troops are concerned. Officers selected for high and responsible command have shown both decision and ability in grappling with and surmounting difficulties, which face them: the transport has been greatly increased, and although a certain amount of hardship may still from time to time be experienced by the troops located in Mesopotamia, this is due more to the inconvenience inevitable in a campaign than to lack of prescience and organisation on the part of the administrative authorities. The medical equipment, both in personnel and material, is also altogether on a higher standard than in the past.

We may add that we have been very favourably impressed by the evidence of the representatives of the War Office, and from that evidence we deduce that the difficulties of campaigning in Mesopotamia are fully recognised by the War Office, and that in surmounting them neither time nor expenditure will be spared in future.

We were directed by the terms of our reference to enquire into the origin, inception and conduct of the operations in Mesopotamia. We have partially performed this task, so far as the origin and inception of the campaign are concerned, by the narrative we have given. We now propose to give fuller attention to the conduct of the campaign, and this task includes an investigation into the "supply of drafts, reinforcements, ammunition and equipment to the troops and Fleet, the provision for the sick and wounded, and the responsibility of those Departments of the Government whose duty it has been to minister to the wants of the forces employed in the theatre of war."

As our narrative has already indicated, the main difficulties to be overcome in Mesopotamia were those connected with transport. This branch of our enquiry, practically covers questions connected with all classes of supplies and reinforcements, and it also materially affected the provision made for the sick and the wounded. We therefore intend to make a close and detailed examination (1) into transport requirements and the measures taken both in India and Great Britain to meet these requirements, and (2) the provision for and treatment of the sick and wounded.

The supply of armament, equipment, and reinforcements necessary for the expedition, will also require notice, and we will deal with this forthwith.

1. Every General who appeared before us agreed that the Mesopotamian Expedition was badly equipped. Sir Beauchamp Duff informed us that the Indian Army, which furnished the expedition, was organised only for semi-savage fighting, was not well found for an overseas expedition, to a large extent used second-rate equipment, and was "backward in every particular." He thought, however, that the equipment was adequate for an Indian Frontier campaign, but even in this very modified commendation he is not supported by Sir Percy Lake, for many years Chief of the General Staff in India, who declared that the Indian Army was badly equipped even for frontier warfare. Both General Nixon and his Chief of the Staff, General Kemball, maintained that the expedition was ill-equipped. Other witnesses, such as General Aylmer and General Younghusband, agreed in this view, the latter indeed asserting that the expedition was badly equipped in every essential, especially transport, ambulance and commissariat.

2. We have elsewhere* expressed our opinion that the unpreparedness of the Indian Army for its task in Mesopotamia was primarily due to a long standing policy of economy and restriction of military preparation to the needs of frontier warfare. For this policy and its results on the outbreak of war in 1914, the Home and Indian Governments were, of course, responsible, and not Sir Beauchamp Duff and the General Staff at Simla. But the unpreparedness for overseas warfare was well-known to the Indian Military Authorities, and when they undertook the management of an expedition which was to fight against Turkey supported by Germany, they ought immediately to have striven energetically to bring the equipment of the expedition up to the standard of modern warfare. We shall deal in the next two Parts of our report with their omissions in this respect as regards transport and medical provision and we regret to find similar omissions in nearly every other branch of military provision, with the exception of the commissariat, though even here the standard was low, and the distribution of food uneven. Serious defects in military equipment, resulting in unnecessary suffering and casualties among the troops, were allowed to persist month after month during the first fourteen months of the campaign, when the Indian Government were responsible for its management.

3. It is true that India was not herself in a position to supply some of the lacking material, such, for example, as heavy guns; and it is also fair to recognise that before the Mesopotamian Expedition was despatched, India had already sent to Europe much of her finest artillery. But when the responsibility of the Mesopotamian Expedition was assumed by India, the Indian Military Authorities do not appear, for at least a year, to have appraised, anticipated or represented to England the needs of the expedition in this very important particular. From the evidence of Major-General Sir Stanley von Donop, late Master-General of the Ordnance in England, it would appear that it was not till December, 1915, after the reverse of Ctesiphon and more than twelve months after the expedition had landed at Basra, that any request for heavy guns for Mesopotamia was received by him, and it was not till May 26th, 1916, more than two months after the Chief of the General Staff at Whitehall had asked what were the requirements of Mesopotamia in guns, that the full artillery requirements in Mesopotamia were at last communicated by India to the War Office.

4. During these months the troops in Mesopotamia had, without adequate preparation by heavy artillery, to attack across the open and, at the cost of heavy casualties, strongly fortified trenches, and General Nixon in his evidence stated that his artillery was not only deficient in number, but out of date in quality. Major Bastow, who was General Townshend's Aide-de-Camp, stated that the advance against Ctesiphon was undertaken with only eighteen field guns, and six horse artillery guns; and Sir Fenton Aylmer informed us that the lack of proper artillery contributed to the failure of the operations for the relief of Kut. We may note that the chief shortage felt was in howitzers.

5. But if it was outside the productive power of India to make good portions of the defective equipment such as aeroplanes, artillery, high explosive shells, machine-guns, etc., there were various other articles which India could have arranged to supply, but the supply of which was not seriously attempted until 1916. The list of deficient equipment disclosed by witnesses is long and multifarious, and we will only mention some of the chief items.

* See Part I., para. 23, and Part XI., D.

There is a consensus of evidence that the force was deficient, even as late as the spring of 1916, in wire-cutters, telephones, watercarts, Véry lights, rockets, tents, mosquito-nets, sun-helmets, periscopes, telescopic sights, loophole plates, flares, bombs, hand-grenades, and even blankets and clothing. Our heavy casualties and reverses were in fact largely due to the lack of articles essential to the success of war carried on under modern conditions.

6. Sir Beauchamp Duff's apology for some of these defects is, that articles such as wire-cutters, rockets, Véry lights, etc., were not available or usually needed in India, or that they were not heard of before the war. This is no defence for the failure to provide them in Mesopotamia eighteen months after the beginning of the war, and we feel it a discredit to the Indian Military Authorities that such a modern device as Véry lights should have been in use by the Turks in Mesopotamia, before it was supplied to our own troops.

7. Our evidence abundantly shows how detrimental the absence of these modern requirements was to our men ; but we wish to draw special attention to the suffering caused by the neglect to supply two articles of equipment, which the most ordinary foresight on the part of the Indian Authorities should have shown to be necessary. The power of the sun in Mesopotamia was well known in India, but the troops were normally only supplied with light-weight, single-fly tents, quite insufficient to keep out the sun. Sir Percy Lake and other witnesses informed us that sunstroke and heat-stroke were not uncommon amongst those using these tents, and Captain Herbert, M.P., stated that as late as April, 1916, "there were 21 lb. single-fly tents for four men, which would not have been healthy in a cold climate, and were intolerable in Mesopotamia. These tents have only one fly, and the casualties from sunstroke could be expected to be appalling." It may be added that the heat is so extreme that even in double-fly tents there is danger of casualties from the sun in Mesopotamia.

8. Even in such an obvious necessary as clothing, the Indian Government seems to have been unable adequately to supply the force in Mesopotamia, small as it was in comparison with our armies in France and elsewhere. Colonel Hehir tells us that there was a lack of proper clothing even for the patients in the hospitals in the summer of 1915, while Captain Herbert in April, 1916, heard many complaints that in the bitter winter months in Mesopotamia, troops had been sent from India in "shorts," and tropical clothing. The nights throughout a considerable part of the year are cold, and, during the winter and spring, the country is subject to cold winds and icy storms. Yet apparently the Commander-in-Chief in India originally intended to leave the provision of warm clothing for the troops to private benevolence, and only consented to undertake such provision after a protest by the Viceroy. Writing to Sir Thomas Holderness on October 21st, 1914, Lord Hardinge, who was then Viceroy, says :—

> When some weeks ago I enquired of the Commander-in-Chief whether proper provision had been made for warm clothing for the troops, he told me that he was relying on private charity for this. I told him at once that I could not possibly agree to our troops being dependent for warm clothing upon private charity, and that I insisted upon the troops being properly clad at the expense of the Government. It will cost six or seven lakhs, but in a war like this what does that matter? It is far better to have warm men in the field than men dying of pneumonia in the hospitals. It is the cheapest course in the long run.

9. Among the defects of equipment one of the most important was the want of aeroplanes. But for this the Indian military authorities were not responsible. When the war broke out, they were just beginning to organise an aviation service, and had established a Flying School. But at the request of the War Office they closed the school, and sent the officers who were pilots back to England. These were only three in number, as matters were in a very embryonic stage. But early in the Mesopotamia Expedition the need for aeroplanes was apparent. In January, 1915, General Barrett represented the importance of this matter more than once, and Lord Hardinge strongly urged the need for aeroplanes upon the War Office. But it was found impossible to supply any until May, 1915. Then two Maurice Farmans were sent, in July two Caudrons, and in August six Martinsyde Scouts. Somewhat later, three hydroplanes of the Short type were sent, and two naval aeroplanes, one a Voisin and one a Henry Farman, fitted with a Canton Unné engine. In October, four B.E.2 C's arrived. But there were many misfortunes. The hydroplanes were not a success, and among the aeroplanes there were losses through engine failure, through other accidents and through normal wear and tear. These misfortunes seem to have worked with aggravated effect by reason of the difficulties of repair, which in part

depended on the difficulty of transport. The upshot was that at the date of the Battle of Ctesiphon there were only reckoned to be five aeroplanes belonging to the Royal Flying Corps in Mesopotamia, and of these only three seem to have been actually available at the battle—a Maurice Farman, a B.E.2 C. and a Martinsyde. This reckoning does not appear to include the naval aeroplanes, of which, however, only one was of any use. None of these machines were fitted either for photography or with wireless apparatus; and though valuable work was done, they were of course inadequate for what was required. The personnel of the Royal Flying Corps was organised as a Flight, and there were six flying officers and forty-four rank and file. During December, 1915, and January, 1916, owing to two machines being shut up in Kut, to accidents, and to the ill-health of pilots, sometimes only one aeroplane was available. Another Flight of aeroplanes was sent out in February, 1916, and from then onward, the Royal Flying Corps maintained a supply of new machines. After that date, there does not appear to have been a shortage in numbers of machines, and from the same time apparatus both for photography and wireless telegraphy came into use. But early in February, 1916, the Turkish troops, who till then had been without aeroplanes, were furnished with three fast aeroplanes of the Fokker type, which were much more formidable fighting machines than anything possessed by the British Army. The presence of these fast machines with the Turkish Army placed the British airmen at a great disadvantage; and the want of at least one efficient fast fighting machine was keenly felt.

10. It is clear that the lack of a sufficient supply of aeroplanes of any kind in the operations which led to the Battle of Ctesiphon seriously hindered our troops in the task they had to perform, and that the want of fast fighting aeroplanes later prevented the Royal Flying Corps being of as much service to the Expedition as they might have been. How far these defects were remediable by the War Office opens up the wide question of the general supply of aeroplanes for the purposes of the War, which has been the subject of an independent enquiry. We are not in a position to express any opinion upon that question, and we certainly should not deny that the first claim upon the resources of the Royal Flying Corps was in Europe and not in Mesopotamia. It is not, however, clear why a larger number of aeroplanes of a type not sufficiently fast for service in France should not have been available for the advance on Bagdad, nor why those which were sent were not equipped for photography and wireless telegraphy. The difficulty of sparing fast machines in the spring of 1916 to fight the three Turkish Fokkers is more intelligible. But we note the deficiency of aeroplanes as one of the defects of equipment which contributed to the ill-success of the British Army in Mesopotamia during the winter and spring of 1915-16.

Drafts and Reinforcements.

11. In considering the question of reinforcement for the Mesopotamian Force, it must be borne in mind that the term "Reinforcements" technically covers both the additional units sent to strengthen the original force in the field, and drafts sent to replace wastage in such units as are already in the country. We have, therefore, for the sake of clearness used the term "Reinforcements" as covering additional units sent to augment the existing strength of the force, and have placed under the heading "Drafts" all personnel sent to make good casualties, whether they be from death, wounds, sickness or any other cause.

12. As a basis of our enquiry into the supply of drafts to Force "D," it may be useful to take the standard laid down in Field Service Regulations. At the same time it must be remembered that after several months of experience of modern warfare this standard has had to be considerably modified, and although it may be said that the Turks were not armed and equipped in the same thorough manner as the Germans (at any rate during the earlier stages of the campaign), yet against this must be set the fact that the expedition was destined to fight in one of the most trying climates and disease-ridden countries in the world, a fact of which the Indian Government and indeed the Home Government must have been fully aware, and which accounted for a very large proportion of the wastage. The Field Service Regulations state that units on mobilisation shall have additional personnel known as "first reinforcements" to the extent of 10 per cent. of the rank and file of each unit. Of the troops sent out of India to France and elsewhere, even had this standard been attained to, which is not at all certain, wastage had eaten up the whole of

the "first reinforcements" long before they were sent to Mesopotamia, this applying equally to British and Indian troops, whilst with regard to those sent direct from India to Mesopotamia, even those that mobilised with their full personnel were soon in need of reinforcing drafts.

Drafts for British Troops.

13. Each British infantry unit ordered on service was supposed to have 25 per cent. of its strength at its depôt in India, and each Cavalry Regiment 33 per cent., to replace wastage until drafts arrived from home. When these depôts were exhausted, it devolved upon the War Office to keep British Units in Mesopotamia up to strength, and each unit, no doubt, had or should have had a depôt or reserve battalion in England preparing and training men to replace casualties. There were a few reservists in India, numbering altogether 651, of whom 255 in private employ were called up in August, 1914, whilst the remainder in Government and Railway employment were not called up till later, and then only those employed by the railways, an effort which produced another 250; but no doubt India looked, and we think rightly, to the War Office to keep the British units supplied with suitable and sufficient drafts.

Sir Beauchamp Duff tells us, however, that not till October, 1915, a year after the first landing, were any drafts sent to India or Mesopotamia by the War Office. On May 21st, 1915, the War Office wires as follows to the Commander-in-Chief, India :—

> Owing to great and increased losses which you, no doubt, know of, every available man is now required to replace casualties; consequently, though we will bear in mind your request, we cannot bind ourselves as to when we can meet your needs. This refers to your telegram of May, 1915, No. S. 10101.

No real blame can be attached to the War Office for this shortage of drafts. It arose from the imperative necessity of replacing losses incurred in France and Gallipoli, but the failure of the War Office to keep to the previous understanding did unquestionably embarrass the Indian Military Authorities.

The effect of this inability to provide drafts is illustrated by General Townshend's statement, that on October 3rd, his English battalions were reduced to mere half battalions. This description is perhaps not quite accurate, but Major Bastow speaking more precisely has told us that at the battle of Ctesiphon the strength of the British Battalions were :— Dorsets, 573; Norfolks, 520; and 1st Oxfords, 619. The full strength of these battalions should have been some 2,500, and they were therefore nearly 33 per cent. below establishment in effectives at this important battle. What the state of these battalions would have been had they not been supplied with drafts from Territorial Regiments in India may be well imagined.

Drafts for Indian Troops.

14. The regulations applicable to Indian troops require men to serve 25 years for a pension. Such a system means that there must be a large number of men in the ranks who would be entirely unfit for the rigours of active service, and its effect is illustrated by the fact that the Indian Government were requested to send to France no men who had had more than fifteen years' service. It was obvious beforehand, therefore, that there would be need for abundant drafts to take the place of unfit men in any active operations in which Indian troops were engaged.

But our evidence shows that the supply of drafts to Indian battalions at the commencement of the campaign from the Army reserve was a complete failure. Sir Beauchamp Duff told us that this reserve for the Indian Army Units proved practically of no value. In fact, we do not hesitate to say that the Indian reserve system entirely broke down under the stress of war conditions. These reserves either as regards numbers, in all some 30,000, or efficiency were quite unable to meet the calls made upon them to maintain the strength of the Divisions sent to France; in fact it was only on the recall of these Divisions, and consequent lowering of the numbers of casualties, that the authorities in India were in any way able to overtake the wastage in Mesopotamia. After that, though a great strain was felt during the efforts to relieve the garrison of Kut, when the casualties to Indian troops amounted to very nearly 20,000, the wastage was fairly well met with new recruits from India. But we cannot believe that the steps taken to obtain recruits were very thorough. For instance, recruiting officers, who in peace time numbered 9, were only increased to 10

under the stress of war, whilst assistant recruiting officers, who numbered 14 before the war, were only increased to 25. Other steps were certainly taken, such as the formation of local recruiting committees, obtaining of assistance from local Governments and native states, etc., but these seem to us somewhat inadequate methods for raising men at such a time.

At the same time it is only fair to say that although the means taken may seem rather meagre, yet the recruits obtained were sufficient to enable the ranks of the Indian forces in the field to be kept at a fairly generous numerical standard after the withdrawal of the Indian Divisions from France. These recruits were mostly utilised to increase the establishment of existing units. This process within limits is preferable to creating new formations, especially in view of the difficulty of obtaining British Officers.

Reinforcements.

15. The history of the supply of reinforcements to Force "D" is a melancholy tale of altercation between London and Simla. Although up to the time of the advance on Baghdad the expedition was always numerically strong enough to cope with the Turkish forces, yet this result was only attained after protracted wrangling between the Governments at home and in India, neither of whom appeared willing to accept the task of reinforcing an expedition, for the success of which they were jointly responsible. When at the commencement of the campaign the 6th Division was ordered to the Persian Gulf by the Home Government in October, 1914, we cannot find that the India Office or their Military Adviser, Sir Edmund Barrow, ever contemplated or arranged for its reinforcement from England in case of need, although it was obvious that even if the expedition were successful, the Turks would make strong efforts to oust it from Mesopotamia, whilst if it were unsuccessful the need for reinforcement would have been even more urgent. On the other hand, the Indian Government adopted the attitude that, having already denuded India of troops by overseas expeditions, it was impossible to send reinforcements from India to Mesopotamia. The danger and friction created by such a situation is well exemplified by what happened in the early part of 1915. At that period the military authorities in England and India were agreed that the Mesopotamia Expedition was in danger of attack by superior Turkish forces, and that its reinforcement by a Division was imperative; but the Secretary of State informed the Viceroy that no reinforcements could be despatched from England, and the Viceroy informed the Secretary of State that no further troops could be spared from India. The difficulty was only got over after much delay and discussion by the Home Government definitely ordering India to send reinforcements to Mesopotamia, and relieving the Viceroy of all responsibility for any consequent danger to India. The reinforcements were sent, though only at the last moment, and they enabled Sir J. Nixon to defeat and drive the Turks before him in the spring and summer of 1915.

16. The next occasion on which considerable reinforcements were required in Mesopotamia was in connection with the advance on Baghdad, which was sanctioned in October, 1915. Again both the Indian and Home Governments agreed that reinforcements amounting to one or two divisions were essential if the advance was to be undertaken, and again we find each Government trying to put upon the other the responsibility for providing part or all of the necessary troops. Owing to the uncertain position of the operations in other theatres of the war, the Imperial authorities found it difficult to guarantee the despatch of two divisions to Mesopotamia within the necessary time, and asked India whether, pending such despatch, she could not, in the meantime, herself provide another division. With the intention of evading this liability, the Indian Government resorted to procedure which, to say the least of it, was disingenuous. There were at the time available in India as reinforcements three batteries of artillery, three cavalry regiments, and two infantry brigades. Information as to the availability of these reinforcements was, however, withheld from the Home Government, and the explanation of this omission is given in a letter from the Military Secretary of Sir Beauchamp Duff to the Military Secretary of the Viceroy in the following words :—

> It is clear that the Home Government are very anxious that Baghdad should be taken, and they will send us the required force if we hold out, but they will give us nothing if the least sign of willingness to find reinforcements is shown by us, and we shall have to do it all by ourselves, and be so weak everywhere that both in India and in Mesopotamia we shall be in danger.

17. Ultimately, the Home Government agreed to find and despatch the two divisions required, but they did not arrive within the time limit originally regarded by India as essential;

Drafts and Reinforcements.

they came in advance of much of their necessary equipment, and before sufficient arrangements had been made for their transport from Basra to the front. Consequently, at a crisis in the fortunes of the expedition, they were largely useless for the purpose for which they had been sent. This incident vividly illustrates that lack of co-ordination between the Home and Indian authorities, which was at the root of so many of the difficulties in Mesopotamia.

18. Such a lack of method in arranging for reinforcements can hardly be termed satisfactory. It is only fair, however, to say that from time to time, up to November, 1915, the Indian Government sent to Mesopotamia a few fresh units, generally a battalion or two at a time. Moreover, under the pressure of events after the retreat from Ctesiphon, in December, 1915, the Indian Government did send two more divisions, one in December, 1915, and another early in 1916, a fact which makes it difficult to believe that India could not have reinforced Mesopotamia at an earlier date.

Chaplains.

19. It was stated in evidence before us that the establishment of chaplains for British troops in India is more limited than for British troops in the United Kingdom. It was also stated that there were not sufficient chaplains with the Mesopotamian Expedition even on the lower basis of the Indian Establishment. This last insufficiency is evidently regrettable, and we draw attention to it accordingly. In regard to the general question of the establishment of chaplains for British troops in the Indian Army, there may be special difficulties in obtaining a sufficient supply of chaplains for this service. But we commend the matter to the notice of the Indian Government, so that so far as possible there may be the same spiritual care for the British troops in India as elsewhere. In the evidence before us we have had proof of the value of the chaplain's labours and the sustaining and encouraging effect they have upon soldiers constantly face to face with death.

सत्यमेव जयते

A. Shortage of River Transport.

1. River transport was from the beginning of the campaign a dominant factor, as its sufficiency or insufficiency regulated the movements of the expedition. This fundamental matter has been treated at considerable length in paragraphs 73 to 87 of the Vincent-Bingley Report.* We concur with the finding therein, but as the terms of reference to that Commission were more limited than ours, they were not able to go so far into the matter as we have been able to do, nor to carry their investigations later than April, 1916.

2. Evidence is overwhelming that a shortage of river transport existed from the time of the occupation of Kurna in December, 1914, and became serious from and after May, 1915. Despite additions that were made, the shortage had become relatively even greater in April, 1916, than at any earlier period of the campaign, owing to the increased numbers of the force. Practically at no time after the advance above Kurna was river transport adequate to requirements. It greatly delayed military operations, in which celerity was an important factor for success, it affected the comfort and feeding of the troops, and it was a direct cause of suffering to the sick and wounded. As evidence of the shortage, we have been told that it took nearly two months to concentrate troops and supplies for the advance from Amara to Kut-el-Amara, and that again the advance from Kut and Aziziyeh towards Baghdad was fatally delayed from the same cause. It seems almost certain that, but for the shortage of river transport, the Turkish Army would have been destroyed between Amara and Ctesiphon; but the want was most acutely felt during the strenuous time when every day counted in the attempt to relieve the siege of Kut. Here, in view of the straits in which General Townshend reported his force to be, time was of the utmost importance.

3. General Lake, at that time General Officer Commanding in Mesopotamia, telegraphed to the Chief of the General Staff, Delhi, on March 22nd, 1916, as follows:—

> I doubt firstly whether the paralysing effect which the inadequacy and late supply of river craft has had on the operations up the Tigris is fully realised by the General Staff at home, and secondly, why our forecasts as to what it will be possible to convey up river have varied, and of late have considerably developed. On January 21st, 1916, when Aylmer fought his action at Hannah, there were 10,000 infantry and 12 guns in the country available as reinforcements, but which, owing to this cause, could not be sent up to him in time.
>
> On March 8th, the date of his last operations, I had, approximately, 12,000 infantry and 26 guns which, for similar reasons, could not be forwarded.

The evidence shows conclusively that shortage of river transport was the chief cause of the failure to relieve Kut.

4. River tonnage available for transport from Basra up river, and the requirements at different periods, were as follows:—

	Daily tonnage available.	Daily requirements.
November, 1915	.. 150 tons	.. 208 tons.
April, 1916	.. 250 to 300 tons ..	.. 598 tons.
August, 1916	.. 450 tons	.. 650 tons.

These figures are given in the Vincent-Bingley Report, and by Major-General Cowper D.A. and Q.M.G., though we make from the latter's calculation of tonnage available the deductions necessary according to evidence, on account of steamers broken down, or undergoing repair. It will be observed that in each case the requirements have been largely in excess of the tonnage available, without allowing for a further increase of the force or for loss of steamers. It may be well to note that since the War Office took over the management of the campaign in 1916, more foresight in preparation and energy in action are evident. To a recent estimate of requirements (namely, 800 tons per day), a 50 per cent. margin for possible increase of force or eventualities has been added, and a large fleet, capable of carrying up river 1,200 tons daily, now has been, or is being, provided, in addition to the transporting capacity of the railways.

5. The evidence before us tends to show that improved control and administration of the river craft available would have mitigated the evils arising from the shortage, although at no time could such improvement have entirely overcome them. In this connection it should be noted that the work of controlling and managing a miscellaneous fleet of river steamers, tugs and barges, with their crews, their upkeep and their traffic, was not in the usual line of Army or Royal Indian Marine experience. It is, we think, unfortunate that

* See Appendix I.

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someone with experience of the management of such flotillas on one of the rivers of India or Burma was not at an early date appointed to assist in this work. Being clearly of opinion that shortage of transport was one of the chief causes of the failure to capture Baghdad and to relieve Kut, as well as a cause of deplorable suffering of the sick and wounded, we have endeavoured to ascertain where the responsibility primarily lay.

6. In November, 1914, when General Barrett took possession of Basra, the river transport available consisted of three steamers, viz., the "Medjidieh," which was the most serviceable, the "Julnar," which required new engines, and the "Salimi," which was used as a ferry boat between Basra and Kurna. Besides these there were four lighters of 60 tons, one of 80 tons, two of 110 tons and ten of 200, making seventeen in all, and some country sailing boats, or mahailas, with a capacity of from 25 to 35 tons. In the words of a witness :—

"The mahailas were very useful for unloading ships in the stream, and bringing the contents to shore. But to go any distance they take a very long time indeed, and if the wind is against them and the tide is against them and the current is against them they cannot move at all. The mahailas that went from Basra to Kurna, about 30 miles roughly, used to start one day and get up there on the third day, or afterwards."

7. On November 23rd 1914, after Basra was occupied, at a conference held at Army Headquarters, Commander A. Hamilton, R.I.M., recommended to the General Staff that they should at once ask for 12 river steamers of the "Medjidieh" class. Commander Hamilton had previously been on the Tigris for two years, and had surveyed the river from Basra to Baghdad. He was, therefore, competent to speak with exceptional knowledge both of the river and of the class of steamer most suitable to its navigation. He urged the necessity of giving orders early, and, owing to the necessary delay in building the vessels, which he estimated at 12 months, he suggested that they should be got from India ready-built. There is reason to believe that had Commander Hamilton's foresight, knowledge, and advice at once been acted upon, subsequent difficulties would have been mitigated, if not altogether avoided. General Barrett does not remember the circumstances. He may perhaps have been influenced by the limited scope of the immediate operations then authorised, but we must note that it is clear from his evidence to us and the Vincent-Bingley Commission that he realised that the expedition would in all probability have to advance as far as Amara and Nasariyeh. At any rate, the Staff at that time did not consider the matter urgent, although it was allowed that six more steamers might be required. Nothing, however, was done until January 2nd, 1915, when, in reply to an enquiry as to the steamers available for use above Kurnah, General Barrett telegraphed to India that, in order to carry a force of one brigade, one squadron, one battery and one company of sappers and miners, with 500 mules and supplies for 10 days, seven steamers and one or two lighters would be required in addition to the existing flotilla. These seven steamers and two lighters were purchased in India during February, 1915. They arrived at Basra in May of the same year. On February 17th, 1915, General Barrett asked for four river tugs, which were purchased in India early in March, 1915, and arrived at Basra shortly after the seven steamers.

8. On May 27th, 1915, General Nixon, who had in April taken command, informed India that the paddle steamers and tugs sent could not be relied upon to work above Kurna, owing to their comparatively deep draught and to the lowness of the river at certain seasons, and asked for six more tugs of certain power, and with a draught not to exceed 3 feet, subsequently modified to 3 feet 6 inches. There were difficulties in finding in India tugs conforming to the specification, and the order was ultimately passed on to England and merged in the August demand* for river craft to be built there. On July 8th, 1915, a comprehensive memorandum was drawn up by General Kemball and forwarded to India by General Nixon. In this memorandum the shortage of river craft and the urgent need for further supplies of craft of a suitable type were strongly emphasized, and warnings given that if steps were not taken in good time to meet these requirements grave risks were being run of a breakdown at possibly a serious moment. General Kemball says :—

Had we had sufficient river transport we could have entered Nasiriyeh at the heels of the Turkish force defeated at Shaiba, and at the same time despatched troops to drive off the Turks then threatening the pipe line up the Karun. We had sufficient troops, but not sufficient steamers, to undertake simultaneous operations.

The same conditions have obtained ever since.

Before an advance could be made from Qurnah the return of the steamers taken by General Gorringe up the Karun had to be awaited.

* See paragraph 9 below.

A. Shortage of River Transport.

Before a force could be despatched against Nasiriyeh the vessels which transported the troops to Amara had to be brought back down the river.

At the present time, before the 6th Division can be fully concentrated at Amara in readiness for a further advance or to meet a forward movement of the Turks, the steamers with the Nasiriyeh expedition will have to be withdrawn.

Military exigencies have permitted no pause in our operations and the consequence has been that all the steamers have been used incessantly. Indeed, these vessels have only been sent for overhaul when they actually break down; but, in spite of these exertions, it has been impossible to prevent operations being prolonged into a season which on account of low water and heat adds difficulties which greater celerity might have avoided.

Such are the conditions to-day and there can be no doubt that river transport will continue to be the governing factor in any future operations.

From the nature of the country and the distribution of the population and political centres any operations against the Turks have to be made along rivers, and the ease and success with which operations can be carried out must naturally depend on the number of suitable steamers, tugs and barges available.

Now up to the present time we have never managed to transport more than 5 battalions with field and heavy guns (but without animals), at any one time. . . . . .

In short, more powerful light-draught river steamers and plenty of them, and not only ships, but personnel and material for their maintenance, are regarded by the General Staff of this Force as our principal need.

It is also thought necessary to add the warning that if steps are not taken in good time to meet these requirements we are running grave risks of a breakdown at possibly a serious moment.

At the present time we cannot make the most effective use of the troops available owing to want of ships, and in any crisis insufficiency of river transport would limit the scope of reinforcements, while a breakdown of shipping might have still more serious consequences."

It was thus pointed out that the most effective use of the troops available could not be made owing to want of river transport, and that in any crisis aid by reinforcements would be limited, while a breakdown of steamers might have still more serious consequences. With the memorandum came a pressing request for the building in England of :—

6 paddle steamers of the "Medjidieh" class.
3 stern-wheelers of lighter draught.
8 tugs of the "Sumana" class.
43 barges of specifications given.

9. The purport of these requirements was telegraphed to London on August 4th, 1915. Delay took place, and it was not until a mail despatch from the Government of India, dated August 20th, was received in London on September 9th, that active steps were taken to place the orders. Even after this date there was further delay—only in part unavoidable—and eventually orders for the six paddle steamers, three stern-wheel steamers and eight tugs were placed on November 3rd, 1915, orders for the barges being placed a few days later. The first of these tugs reached Abadan in April, 1916, the first paddlers and stern-wheelers in June, 1916, and the 43 barges arrived at different dates between April, 1916, and the end of the year. All except the six paddle steamers were shipped either in sections or in the form of plates, and had to be erected after arrival in Mesopotamia, so that a considerable period elapsed after their arrival before they were available for use. Some were not ready in January, 1917.

10. Finding that the order from England meant at least 12 months' delay, and in view of the supreme importance of meantime obtaining more river transport without delay, General Nixon telegraphed to India on October 9th, 1915, as follows :—

Please procure quickly some powerful light-draught tugs or stern-wheelers in India, which will serve present needs and thereby greatly strengthen military operations, which are very seriously impeded. This is a very urgent need.

and again on October 13th, 1915 :—

If anything of suitable draught and approximating to other requirements can be sent here soon they will serve as useful stopgaps till new craft arrives. Please, therefore, do whatever is possible to meet our urgent difficulties meanwhile.

In response to these pressing messages, the Indian Government eventually secured in India a large number of steamers and barges which did not, however, arrive till January to April, 1916. Subsequent orders followed during 1916 for the supply of many more river craft from England, but we do not think it in the public interest to give details as to these.

It will be sufficient to state generally that upwards of 700 river craft of all kinds have been sent or are on order, and that the margin over estimated requirements now provided for should safeguard the future. The foregoing summary of the demands for

tonnage up to the beginning of 1916, covers the period which is the main subject of our enquiry. Any vessels asked for after January, 1916, even if ready-made in India, could not have had any effect either upon the operations for the capture of Baghdad in 1915 or for the relief of Kut.

11. In order to appreciate the responsibility attaching to General Nixon, it is necessary to look at the position on the various dates on which he suggested the main moves up the river, or received authority to make these advances. The three most critical dates may be taken as those of the decisions to advance from Kurna to Amara, from Amara to Kut, and from Kut and Aziziyeh to Baghdad. Each of these advances, it must be remembered, involved a special demand on the River Transport in respect of the carriage of troops, ambulance transport, artillery, &c., and *pro tanto* diminished the amount of River Transport available for ordinary supply. The dates when these advances were authorised were May 23rd, 1915, August 7th, 1915, and October 23rd, 1915.

General Cowper gives the daily tonnage available on these three dates as 175 tons, less an allowance for vessels off work for repair, leaving, say, 150 tons daily available at each of the three dates.

General Lake, in the despatch describing the operations of the force under his command, writes as follows :—

> The number of steamers available in January, 1916, for river transport purposes was practically the same as when, in June, 1915, the first advance up the Tigris took place.

In addition to steamers and barges, a certain number of native sailing craft, called mahailas, were utilised, but were unreliable owing to their being unable to make progress up river against wind and current.

12. It is important to remember what General Nixon had before him in taking the first step from Kurna up the river. Each of the advances from Kurna to Amara, Kurna to Naseriyeh, Amara to Kut, and Kut towards Baghdad, was, it is true, only taken after it was recommended by the General, and authority obtained from the Government of India and the Government in London. Nevertheless it is our definite opinion that these advances—at least as far as Kut (just outside the limit of the Basra Vilayet)—should have been anticipated by General Nixon and provided for in time, seeing that even the possibility of an advance to Baghdad could not have been out of his mind, in view of the instructions given to him on his proceeding to Mesopotamia to take command.

13. The following is an extract from the orders given to him by the Commander-in-Chief in India, dated March 24th, 1915 :—

> " Operations. After acquainting yourself on the spot with the present situation, you will submit :—
> 1. A plan for the effective occupation of Basra Vilayet.
> 2. A plan for the subsequent advance on Baghdad."

It is clear, however, that the Government in London had no intention at this time of authorising an advance, so far as Baghdad. The correspondence shows that they deprecated too large a commitment in Mesopotamia, and the limits of action indicated by them were the protection of the pipe line from the Anglo-Persian oilfields to Abadan and the occupation of Basra Vilayet which extends to a point just below Kut-el-Amara. But in the case of military operations dependent on river transport, the need for timely preparation was of special importance. It would appear in these circumstances no more than ordinary prudence to prepare long in advance for all contingencies, and not to advance until the necessary transport had been provided.

14. The total tonnage on the river on May 23rd, 1915, was small—too small even for the existing force, if it was to advance and thereby lengthen the lines of communication. Moreover, of the steamers available more than half exceeded a draught of 3 feet 6 inches, and it had already been found that it was practically impossible to get suitable steamers from India, with a maximum draught not exceeding this limit. The only alternative, therefore, so far as river transport was concerned, was to build new steamers, and these could not be available under 12 months from the date of the order being despatched.

15. A great deal of correspondence and some misunderstanding took place between General Nixon and India as to the specification, and in particular the maximum draught of steamers suitable for Mesopotamia. It is difficult to visualise the conditions of the river and of the country. At certain times of the year the river overflows its low banks, and the plain is turned into a vast sea of water. Transport by road,

therefore, cannot be relied on, although practicable with difficulties during part of the year. Just above Kurna are what may be called the Straits, where the passage of the river at all times is difficult, and particularly so at the season of low river. One witness —Commander Huddlestone, R.I.M., writes in an appendix to his evidence :—

The river between Kurna and Amara is roughly very narrow—some 85 to 250 feet broad -with real hairpin corners, and very shallow, and a very strong current, some 3 to 6 knots. The banks are from 3 to 5 feet high, and the bend so sharp that the advance of the vessel coming down, notwithstanding the helm, sends her—or rather, her barges* right smack against the banks. If she has not got barges she goes against them herself. The result is not so bad at this time of the year, as would be expected, because the bank gives way, and the vessel or barge bounds off again, cannons against the other side, and proceeds, and repeats the performance some two or three times an hour, sometimes more, sometimes less. In summer, when the banks are hard, the damage done to vessels and barges is immense, and even now they do a considerable amount of damage to themselves, and so, in designing vessels, I give you what I think are the chief points to be borne in mind :—

(1) Draught should not exceed 3 feet 6 inches for steamers, and 3 feet for barges.
(2) Length should not exceed 212 feet for steamers, and 170 feet for barges.
(3) The steamers should be made of steel, with independent paddles.

16. Another witness, Commander Hamilton, R.I.M., stated in his evidence :—

I doubt if steamers really suitable for the Tigris exist anywhere, especially as troop-ships. So the only ones that we can call really satisfactory (other than Lynch's), will be the ones specially built, or building, in England to our design on Lynch's pattern. It is the shallow draught required, combined with the necessary size of vessel and horsepower which renders any ready-made ones from other parts of the world more or less, and in many cases quite, unsuitable. It must be remembered that the Tigris in the low-river season (a normal low-river season) is, after all, only a glorified ditch in many parts. It is not yet fully realised by the Army, I think, that last low-river season (August to March, 1915), was abnormally high. The result was that the comparatively deep-draught steamers (about 5 feet actually), which we received from Burma were actually able to run regularly right up to the front during all the low seasons. We had stipulated, and still stipulate, that 3 feet 6 inches is the standard safe draught for that river in low season. It is so normally, but the Army have got so used to seeing the deeper-draught ones going successfully that I feel rather anxious about the outlook should the river take it into its head to fall as low, as it can do on occasions. Should it do so, I fear a large part of our ready-made imported fleet of paddlers would be out of action, as most of them are much over 3 feet 6 inches when loaded. . . It has been found by experience (Lynch Bros. records), that it is not worth risking a draught of over about 3 feet 6 inches in the low river. Besides which paddle-steamers "settle" 7 or 8 inches when moving in such shallow water, so that they always require several inches more water than their stationary draught would lead one to suppose.

Above the Kurna Straits navigation is easier as far as Kut, except for some shallow patches. Above that point the river is again difficult, and 3 feet 6 inches is the maximum draught suitable. It is evident from all the information before us, that to rely on the deeper draught vessels being able to navigate the river above Kurna at all times of the year was to take a great risk, and what this risk might involve it is not difficult to picture.

17. In our opinion General Nixon was perfectly right in insisting that the maximum draught of vessels supplied to him should not exceed 3 feet 6 inches, but he might have made it more clear to the authorities in India that, failing these, he could make use of deeper draught steamers during part of the year and during all the year on certain stretches of the river. On the other hand, General Nixon does not appear to have appreciated at an early stage in the operations that such vessels as he required were not obtainable ready-made, and would have to be specially built. The result was that demands were sent forward embodying cast-iron conditions which could not all be fulfilled by ready-made vessels, while the authorities in India showed little appreciation of General Nixon's difficulties, and were not very helpful in suggesting substitutes, many of which, it was afterwards found, were available, although not in all respects suitable. It was only on July 10th, 1915, that General Nixon sent forward General Kemball's survey of the situation, and recommended the building of steamers, tugs and barges suitable for the river. These could not reasonably have been expected to be available for use before the middle of 1916, and, as a matter of fact, they were not ready until later.

18. In making the advance from Kurna to Kut (a distance by river of 243 miles), we are of opinion that General Nixon took great risk (1) on account of the inadequacy of his river transport as a whole, and (2) on account of the inability of a large portion of it to navigate the river above Kurna in a normal low-water season. Our opinion in regard to this is even stronger when we come to consider the advance from Kut towards Baghdad, because, first, the river above Kut is shallow, secondly, the distance from the base is greater (an additional difficulty if river transport above Kut was to be relied on), and thirdly, General Nixon by that time knew of the large reinforcements which he was to

* Which are attached to her on either side.

receive, and that an amount of transport inadequate to a smaller force and shorter line of communication must be still more inadequate for a larger force and longer line of communication. We think the plea that steamers and barges had been asked for is not an answer. It was known that what had been asked for could not be available for a long time, and certainly not until long after the operations referred to had been carried out. Moreover, Sir John Nixon was informed on the 28th October by his Inspector-General of Communications that he estimated that in addition to the shipping already ordered, 12 more steamers and 24 barges would be required in view of the expected reinforcements. This estimate he did not apparently pass on to India or London. If he had done so, in view of the insistence by both the Indian and Home Governments on the necessity for the prompt arrival at Baghdad of the reinforcing two divisions, it is at least open to doubt whether the sanction to the advance would not have been countermanded.

19. The responsibility for making the respective advances with insufficient transport and for the military reverses, discomfort of the troops, and abnormal suffering of the sick and wounded which resulted from such insufficiency, attaches primarily to General Nixon, whose estimate of the military exigencies of the moment must, however, be taken into account. At the same time we cannot exonerate the Commander-in-Chief and the General Staff in India, who had a survey of the river in their possession, knowledge of the difficulties of its navigation, a list of all the steamers available, knowledge that many of them were of too deep a draught for the low season, and information as to the lengthening of the communications and the reinforcements which were being sent In these circumstances to authorise and even recommend to the Government in London the various advances without satisfying themselves that the expedition was properly equipped with river transport, and, indeed, actually with the knowledge that it was not, involves Sir Beauchamp Duff in a large measure of responsibility. While a copy of General Nixon's despatch of July 10th, 1915, and of General Kemball's memorandum was received by the India Office and forwarded to the War Office in September, it was not laid before the Secretary of State for India. Moreover it does not appear that General Nixon's actual shortage of river transport was brought by the Military Department of the India Office before the various expert bodies subsequently consulted in such a way as to attract their attention, and in consequence the War Council or Cabinet when they were asked to sanction the advance on Baghdad were not cognisant of the risk. As these documents were attached to a requisition for a large amount of river transport the Military Branch of the India Office sent them all on to the Stores Branch of that Department as an indent ; and though the memorandum was forwarded to the War Office, it was not accompanied by any letter calling special attention to the revelation made as to the grave shortage of transport. This blunder led to serious consequences, for which General Barrow cannot be exonerated as the head of the Military Department at the India Office. We have shown elsewhere that the advance on Baghdad was proposed and sanctioned on the understanding that there would be large reinforcements for General Nixon's forces, and such reinforcements were of little immediate value if the River Transport to convey them from Basra to the front was not available. It may well have been that had General Kemball's significant reminder of the correlation between reinforcements and transport been brought to the notice of the War Council, the Baghdad adventure and its attendant misfortunes would have been avoided.

Responsibility for Shortage of River Transport.

20. Important witnesses before us have differed widely as to the incidence of responsibility for the supply of river transport for the Mesopotamia Expedition. Sir Beauchamp Duff informed us that Sir J. Nixon in Mesopotamia rather than the General Staff in India was responsible for calculating how much river-transport was required. On the other hand Sir J. Nixon said, " It was the duty of India to ask and find out what was required for the forces, and not to impose the intolerable burden on me of having continually to fight to obtain the necessary supplies, etc.," and in support of this contention he referred us to the Field Service Regulations.

21. Under the Field Service Regulations the Commander-in-Chief in the Field (in this case, Sir John Nixon) is " relieved of direct responsibility for the conduct of the business of providing the requirements of the forces in the field." It is also laid down that " responsibility for the adoption, modification, or revision of plans of operations rests

with the Government, who, on approving a plan assume responsibility in principle for the provision of the requisite forces." Sir J. Nixon assumed, and we think justly, that "requisite forces" must be held to include all the requisite auxiliary services. In the present case, the management of the Expedition had been devolved by the Home Government upon the Indian Government; it would seem, therefore, that the primary responsibility for providing the requisite river craft, not only for the original plan of campaign, but also for the extension of such plans involved in the successive advances to Amara, Kut and Baghdad, rested with the Indian Government.

22. On the other hand the Regulations provide that the Commander-in-Chief in the Field "is responsible for the efficiency of the forces in the field," and anticipate that he is to make demands for what he requires. Where, therefore, as in the present case, the efficiency of the forces was absolutely dependent on the supply of river craft, it would seem clear that Sir John Nixon was responsible for placing his needs in river craft before the Indian Government in an adequate manner and with anticipation.

23. Between the two authorities concerned, viz., the Government of India and the General Officer Commanding in the Field, in our opinion there was to a large extent joint and mutual responsibility. In any case, the true test is to be found in common sense, and not in questioning the legal interpretation of what is in a book of Field Service Regulations, written, no doubt in contemplation of very different circumstances from those of the Mesopotamia campaign. In our view the situation called for co-operation, thoughtful anticipation of needs, mutual and ready helpfulness. General Nixon's expectations as to the existence of suitable steamers, and the promptness with which they, or others specially built in England, could be delivered in Mesopotamia, erred on the side of optimism, but he was necessarily devoid of the requisite information on which to form a correct judgment. The Government of India was in a position to know the facts, and, as regards the all-important supply of river steamers, failed lamentably in co-operation, anticipation of needs and ready helpfulness. We consider that responsibility for the shortage of river transport rests mainly with the Government of India, in its various Departments. For their failure in this matter, which was the foundation of all the troubles in Mesopotamia, no censure could, in the circumstances, be too grave.

Provision of River Craft from India.

Bearing these considerations in mind, we now proceed to examine how the supply of river craft for Mesopotamia was dealt with.

24. The general conditions in Mesopotamia were known in India at the beginning of the war. The absence of roads, the importance of the rivers as means of communication, many of the peculiar features of those rivers, and the number and class of river steamers in the country in the autumn of 1914, are all noted in a small hand book of information furnished to the Expedition by the Indian General Staff. Moreover, further particulars as to navigation of the Tigris were accessible to the Indian Government—the Royal Indian Marine had for years maintained a "Station" ship at Baghdad, and one of their officers, Commander Hamilton, had made a survey of the Tigris in 1905-1907. We think, therefore, that it was incumbent on the Indian Government to have foreseen that a large supply of special river craft would become a necessity for the Expedition directly it advanced above Kurna, the limit on the Tigris for ocean-going steamers.

25. This necessity and a responsibility for meeting it was indeed to some extent recognised by the General Staff in India as early as December 30th, 1914, when they asked General Barrett to find out how many steamers he could procure locally for use above Kurna, and what number of craft he would require in the event of an advance up the Tigris or Euphrates. General Barrett replied that he would require 7 more steamers and some lighters. It is important to remember that this estimate of General Barrett related only to his then force of roughly one division, although later on, when these steamers were provided, *viz.*, in April-May, 1915, it was apparently considered by the Indian Government that they constituted a sufficient increase of river transport to meet the needs of two divisions. But in their communication to General Barrett the Indian Authorities did at any rate definitely recognise some responsibility for ascertaining what river craft would be required in the event of an advance. From this time, however, up to the beginning of 1916, they do not seem to have again recognised this responsibility. Before the advance from Kurna to Amara was sanctioned, they did not make any inquiries as to the sufficiency

of the transport; before the advance from Amara to Kut-el-Amara was sanctioned they contented themselves with obtaining general assurance from General Nixon that he was able to maintain the force of a division or more at Kut in all states of the river. They made no efforts to ascertain or estimate what the requirements in river craft would be for the advance to Baghdad, or for the reinforcements which they sent or asked to be sent to Mesopotamia. Indeed so much out of touch was Simla with the actual situation in Mesopotamia, that we find the Indian General Staff, in "appreciations" in June and September, 1915, definitely stating that the Expedition was well supplied with river craft, and using this among their arguments for the advance to Baghdad.

26. During the whole period of the most important developments of the campaign, *viz.*, from January, 1915, to January, 1916, the attitude of the Indian Government, therefore, seems to have been that they had little or no responsibility in the matter of providing river craft, beyond attending to the specific demands sent to them from Mesopotamia itself. We think that both the regulations and common sense demanded that the authority responsible for providing the requisite river craft should have taken greater care to ascertain what was requisite. The Indian Government did not in fact exercise that oversight and foresight over the needs of Mesopotamia in river craft which was demanded of them by their position and responsibilities as the authority placed in management of the campaign. On the other hand, General Nixon did not in our opinion sufficiently assist the Indian Government by informing them well beforehand of his anticipated needs in river craft.

27. With regard to delay in fulfilment of orders for river transport we made inquiry into the procedure, and investigated the causes of delay. Correspondence was usually conducted between the General Officer Commanding in Mesopotamia and the Chief of the Staff in Simla or Delhi. From the latter officer anything about river craft would be transmitted to the Quartermaster-General, who would thereafter communicate what he thought necessary to Captain Lumsden, the Director of the Royal Indian Marine at Bombay. The work falling upon Captain Lumsden, R.N., and an insufficient staff, in connection with ocean transport appertaining to four Indian Expeditionary Forces, has been heavy. He was not in touch with all that was going on in Mesopotamia, nor informed of the scope of the expedition. Neither the Quartermaster-General nor Captain Lumsden appears to have fully appreciated in time—certainly down to July, 1915—the seriousness of the river transport situation. Orders for craft involved a divided responsibility between the Quartermaster-General up-country, who was in touch with Mesopotamia but not with river craft, and the Director of the Royal Indian Marine in Bombay, who was to some extent in touch with river craft but not with Mesopotamia. The result has been lack of knowledge, initiative and resource, as well of helpful anticipation in the important first nine months of the campaign.

28. It was undoubtedly General Nixon's duty to formulate his own needs with regard to class of vessels and to specify what was required, but it is, we think, unfortunate that when difficulties first arose as to their specifications and draught, a competent person, preferably with experience of river craft, was not at once sent from India to look into the matter on the spot, and confer with General Nixon as to the usefulness or otherwise of what could be obtained ready-made in India. But this was not done. Captain Lumsden did not think it necessary to go himself, he failed to rise to the occasion, and in consequence it was not till late in 1915 that boats in large numbers were offered by India which might have been offered long before. Many of them were accepted by Mesopotamia, and although a number proved unsatisfactory, some have been of use. In consequence of the delay, however, none of these boats arrived in Mesopotamia until early in 1916. Had they been available for General Nixon between October and November, 1915, they would have materially lightened his transport problems, and might, perhaps have even altered the history of the campaign.

29. In response to General Barrett's request, the first craft, namely 4 tugs and 7 paddle steamers, had been sent by India. They arrived in April—May, 1915. The following is a paraphrase of the communications that ensued between General Nixon and the Chief of the General Staff in India:—

> *May 27th*, 1915.—Mesopotamia asked that in view of deep draught of steamers and tugs received, rendering them unreliable for use above Kurna, 6 tugs of 3-ft. draught should be sent.

A. Shortage of River Transport.

June 14th.—India asked whether 4 named paddle steamers, 2 stern-wheeled steamers and 2 tugs, the draught of all being between 2 ft. 3 ins. to 3 ft. 6 ins., would be suitable if available.

June 16th.—Mesopotamia cabled accepting as many of the 8 as were procurable.

June 20th.—India telegraphed that some of them were found to be too deep, and that the others of suitable draught were not available (no reason given). They added—" no tugs, as asked for on May 27th, available in India."

June 20th.—Mesopotamia cabled asking for 4 tugs of 3-ft. 6-in. draught.

July 10th.—Mesopotamia asked for 6 paddle steamers, 3 stern wheelers, 8 tugs and 43 barges to be specially built (in England). The draught specified was 3 ft. 6 ins. for the steamers, and 3 ft. 5 ins. for the tugs.

(N.B.—Orders for these were placed with builders in the United Kingdom in November, 1915.)

July 17th.—India telegraphed that tugs suitable to the requirements cabled on June 20th were " not at present available."

October 9th.—Mesopotamia telegraphed to India: " Vessels over 3 ft. 9 ins. now useless; send quickly some light-draught tugs and stern wheelers to serve immediate needs."

October 12th.—India replied: " Have tried Indian rivers without success."

October 13th.—Mesopotamia telegraphed, draught admissible for tugs 3 ft. 5 ins., stern wheelers, 2 ft. 6 ins., adding, " if anything of suitable draught, and approximating to other requirements, can be sent here soon, they will serve as useful stop-gaps till new craft arrive. Please do whatever is possible to meet our urgent difficulties meanwhile."

October 26th.—India telegraphed, " No tugs of description given in your telegram of October 13th are procurable in India or Burma, and stern wheelers cannot make sea journey."

October 27th.—Mesopotamia telegraphed, " Please wire description of any tugs that are available, with draught."

November 6th.—Mesopotamia telegraphed, " Matter urgent, please wire details."

November 7th.—India wired that they were receiving such large lists of steamers that they were having them " whittled down by a special staff," with a view to selecting only such vessels as would be suitable. They promised to forward a list shortly.

November 9th.—Mesopotamia telegraphed, " Please telegraph the list of ships, details can follow by post. You know our requirements as regards dimensions. Draught should not exceed 3 ft. 6 ins. Please treat the matter as very urgent."

November 10th.—India telegraphed to Mesopotamia the names and particulars of no less than 48 river steamers.

30. Of these latter, according to the description, 9 fulfilled the requirements as to draught sent by Mesopotamia on May 27th, although on June 20th and October 12th the Indian authorities had telegraphed that no such tugs were available in India. Other 4 fulfilled the requirements of June 20th. It may be that some of these 13 tugs, while being of suitable draught, were not in all other less important respects exactly what was wanted, but, in view of Mesopotamia's urgent need, we are impressed by what appears to us as serious neglect on the part of the Director of the Royal Indian Marine in not offering these craft to Mesopotamia at a much earlier date. If they had been offered, and accepted in response to the requirements cabled on May 27th, June 20th and October 9th, they could have been strengthened and prepared for the sea voyage to Basra, in ample time to make the voyage as soon as the monsoon permitted—say in October or November, 1915—and have arrived in time to relieve the very critical condition as to transport which existed in December, 1915. It further appears to us that Captain Lumsden failed to appreciate his duty, in that he did not at an early date have a complete list and survey made of all the river steamers and light-draught tugs in India and Burma.

Placing of Orders for River Transport in England.

31. We have already referred to the order sent to the India Office for 6 paddle steamers of the " Medjidieh " class, 3 stern-wheel steamers of lighter draught, 8 tugs of the " Sumana " class, and 43 barges. The order was cabled on August 4th, 1915, and written despatches with full particulars were received in London on September 9th, 1915. The urgency of the order, and the necessity of adhering to the type, dimensions, and draught of the

vessels required, were emphasized by Commander Hamilton, General Kemball, General Nixon, the Commander-in-Chief in India, and finally by the Viceroy and his whole Council. Previous experience had demonstrated the defects of ready-made craft received from India, and of any other boats not specially built to meet the exceptional conditions of the Tigris. Success and possibly the safety of the Expedition depended upon ability to get transport up and down the river at all times. After many years of experience, Messrs. Lynch Bros., who held a concession for a steamer line on the Tigris, had evolved a type of steamers, of tugs (to tow large flat barges, one lashed on either side), and of barges, which were considered by those with local knowledge to be the only types entirely suitable for the river.

32. It was a *sine qua non* of the order that these models only be sent, and the India Office was requested to contract for the building of the craft with Messrs. Lynch Bros.; or to engage their assistance, obtain the loan of their plans, and the benefit of their expert knowledge. Messrs. Lynch Bros. of London and Basra, not being shipbuilders themselves, and all yards being at the time precluded from accepting orders for early delivery from anyone but the Government, could not contract to supply the boats, but offered their assistance, plans and expert knowledge, including bringing home their supervising engineer from Basra, for a commission of 5 per cent. on the cost of the boats on this side, and to erect them at Basra at cost without any addition of profit. Finally, the India Office offered Messrs. Lynch 1,500 guineas, to which the latter replied that, while it was not on a commercial scale, on patriotic grounds they would give their services and plans for 2,000 guineas. The value of the order to be placed and supervised was about £600,000. To this offer no reply was sent for some weeks. Meantime, the India Office consulted Sir John Biles, their expert naval architect (who was employed on a commission basis), to assist them. With the power of a Government Department behind him, Sir John Biles was able to go direct to the builders of the "Medjidieh," belonging to Lynch Bros., and get a copy of the plan of their steamer. The transaction might perhaps be criticized from other points of view, but we are more concerned with the failure to make use of the unique knowledge, and to engage the expert assistance which was available, in the face of the strongly expressed wishes of the General in Command in Mesopotamia, and of the Viceroy, and in view of what ensued therefrom.

33. The six new paddle steamers asked for were to be duplicates of the "Medjidieh," with certain interior improvements in the arrangements. The India Office, no doubt acting on the advice of Sir John Biles, thought it well to give the boats more power. Without consulting Mesopotamia, they ordered heavier machinery, and altered the dimensions of the hulls. As a consequence, the new boats draw more water than the "Medjidieh," burn considerably more fuel, and are more difficult to manœuvre, particularly when navigating with two barges abreast through the Narrows. Even if barges are not required for cargo or troops, they are required for protection of steamers' paddle-wheels, which otherwise would be stripped of their floats by collision with the banks. Above Ezra's Tomb the river is very narrow for a distance of 28 miles. In this portion its maximum breadth does not exceed 200 ft., and in certain places is not more than 140 ft. from bank to bank. The difficulty, from the navigation point of view, is enhanced by the twistings and turnings of the river—which, in certain cases, amount to the sharpest of bends—and by the rapid current.

34. General Cowper informed us that—

> It is impossible to adequately convey or describe the extraordinary difficulties of this portion of the river. In short, they must be seen to be appreciated, especially the passage of them made both up and down in a river steamer, towing two barges abreast, and bumping her way, when coming down stream, from side to side as she rounds the various bends.

35. After these new vessels reached the Tigris, and were put into commission, a telegram dated August 26th, 1916, was sent from Mesopotamia to the Commander-in-Chief in India, in which, referring to the suitability of the new river vessels, it was stated:—

> "'Medjidieh' represents extreme in regard to limits for length, breadth, width. River vessels designed constructed in England, of new 'Medjidieh' class, are unsuitable for river, particularly during the low-water season; cannot navigate without barges to protect their paddles, and their beam is then too great for manœuvring either for Narrows or channels through all shoals up river."

36. With regard to the barges, the India Office, ignoring instructions that they were to be built 150 ft. long, and to be on Lynch's model, which have pointed bows, ordered them 170 ft. long and to have square or punt-shaped ends. While these square-ended barges may be suitable for other parts of the world, they were fatally unsuitable for the navigation of the Tigris, where, owing to the crashing of the barges into the

river banks in the Narrows, and the collisions that frequently occurred with passing vessels, it was essential to have rounded or pointed ends. The matter might appear, at first sight, of minor importance, but it turned out otherwise. As soon as the General Officer Commanding in Mesopotamia became aware of the departure from the orders sent home, he telegraphed, on March 27th, 1916, protesting against the change, and against the omission to make use of Messrs. Lynch's assistance and experience, further asking that any barges that remained to be constructed should be of the model asked for. The India Office, in their reply of March 31st, refused to accept the General's view, and adhered to their opinion that the barges they had designed were "suitable for the Tigris, and in many respects superior to anything there." On April 6th, 1916, the General telegraphed re-stating his conviction as to the unsuitability of bows of square shape, which conviction he stated was based upon the best local expert advice. He pointed out that it was dangerous to make experiments, and better to adopt what had proved to be successful, beyond which, if the square-ended barges proved unsuitable, as he feared, the consequent delay and difficulty might have a paralysing effect on the success of future operations. In reply to this, the India Office not only declined to alter the barges which were being built, but directed that further 25 barges about to be built should also have the square-shaped pontoon bows.

37. Pressed as he was at that time by overwhelming difficulties, with a starving garrison in Kut hoping daily for succour, inadequate forces at the Front to effect their relief, and 10,000 men at Basra who could not be got up the river in time, owing to inadequacy of transport, it would be surprising if the General Officer in Command was not driven to something approaching desperation. This is indicated in the following extract from his telegram to the India Office, dated April 11th, 1916, in which he surveys the attitude of the India Office :—

> It is incumbent on me to invite your attention to what, in my opinion, is an incontrovertible fact, but the relative importance of which it is difficult for anybody outside this country to estimate. In my judgment it is quite beyond the ability of anyone in England or elsewhere, unless he possesses a wide personal knowledge of this country, to form any correct estimate of the peculiarities of Mesopotamia or, in particular, of the idiosyncrasies of the Tigris. Full details of the specifications of what I required in regard to barges and river craft which were to be specially constructed for eventful use in this country were given in my telegrams dated 10th July, and July 17th, 1915 to the Chief of the General Staff, Simla, with the object of further ensuring that all vessels would be constructed on lines essential to successful employment in Mesopotamia. I recommended in my telegram of July 23rd, 1915 to the Chief of the General Staff, India, that the consulting engineer to Lynch Bros., Mr. Thomas, should be despatched to England to superintend the construction of steamers subsequently, vide my telegram of August 5th to the Chief of the General Staff, India. I suggested that ouragents in the matter should be Lynch Bros. In spite of the above and having regard to the fact that Tigris craft have been navigated for upwards of 70 years by Lynch Bros., and also that the practical experience gained by the Officers of the Royal Indian Marine since the beginning of military operations in Mesopotamia is coincident with Lynch Bros.' unique knowledge of the idiosyncrasies of the Tigris it seems that your naval architect has thought it desirable to design a type of barge which is suitable in his opinion. Having regard to the facts stated above and in the event of these barges, with square above? (bows), proving a failure which is expected here I think it very necessary that I should lay before you the fullest details of the case as it now stands. Not only is there the question of loss to the State, but what is of greater importance the possibility also of my being sent a large number of barges which although the intention was that they should be specially built for a particular purpose may not be found suitable for local requirements.

38. It was then too late to alter a large number of the barges appertaining to the first order sent home. Thirty-five barges, each of 250 tons capacity, and seven of smaller dimensions, all with square ends, were shipped. They were, after trial on the Tigris, condemned as totally unsuitable for navigation of the river. Much delay was involved in replacing them. Months of time were lost, and a large amount of public money.

39. Responsibility for these errors must rest with the India Office, who authorised or concurred in departure from the lines of an order laid down with so much emphasis in the despatch to which we have already referred. But the matter does not end here; barges, tugs and stern-wheel steamers were sent out in sections, or in plates and angles. Arrangements for their erection in Mesopotamia were made by the India Office, with little prevision of what would be required. The arrangements proved to be quite inadequate. It was a work of no little magnitude to discharge, assemble, erect and fit up complete, 11 steamers and 43 barges, with insufficient plant and mechanics and under trying local conditions Much loss of valuab'e time occurred, and vessels expected to be ready for use a few weeks after arrival were not available for many months. Some of the craft were sent in very large and heavy sections. Means of handling them in Mesopotamia proved inadequate and when an attempt was made to put them together in the river it

was found almost impossible, and some sections sank in 30 ft. of water. Part of the remaining sections were the nordered to be sent on to Bombay for erection there, and thereafter to be towed back to Basra, involving much cost, risk and delay. Material for erection of the barges and other craft was sent out in large shipments. No descriptive note of contents of packages accompanied the first shipments, and no drawings or erection plans were sent with them. The latter were only received in September, 1916, for vessels, the materials for which had arrived four or five months previously. The confusion which arose from this unbusinesslike proceeding was almost unbelievable, and must have been heartbreaking, in view of the urgent need for the vessels. Cases were discharged up and down the bank of the river and stretched a long distance. To find a particular piece required for the completion of any particular barge, tug, or steamer was almost hopeless.

To sum up :—

(1) The paddle steamers sent were unhandy and otherwise unsuitable.
(2) The square-ended barges proved a complete failure.
(3) Arrangements for erection of craft were altogether inadequate.
(4) Sections sent were too heavy for the local facilities.
(5) Lists of the contents of packages were not sent.
(6) Necessary erection plans and drawings were not forthcoming.

More inept proceedings than those connected with the purchase and shipment of river craft in England in 1915 and early in 1916 would be hard to find.

It is difficult for us, owing to the divided organisation of the India Office, to exactly apportion personal blame for this series of blunders, which were not only costly but also caused regrettable delay. The Director-General of Stores apparently acted upon the advice of Sir John Biles in allowing the specifications of the steamers and barges to be altered. His action in other matters was unbusiness-like.

Erection and Repair Shops.

40. The workshops and slips which existed in Mesopotamia on the outbreak of war were naturally of small size and quite unfitted to cope with the erection and repair of the large fleet of river craft required by the Expeditionary Force. So far as normal conditions were concerned, and even with the outlook of greater trade after the War, there was nothing in prospect to induce the local firms largely to increase their workshops. In consequence of arrangements with the Admiralty and India Office some extensions were undoubtedly made, but these were far short of the needs. In our opinion, the importance of adequate provision of workshops, slips and docks for the erection and repair of river vessels was not apprehended by General Nixon, the Indian Government or the India Office. The undertaking turned out to be one of great magnitude, and involved very large expenditure. From incurring the latter General Nixon apparently shrank, and his demands towards the end of the period of his command appear to have been on too small a scale. The fact that provisions were not made at a much earlier date unfortunately greatly delayed the availability for service of river craft—old and new. After the War Office took control during 1916, the matter was comprehensively taken in hand. Since that time over 7,000 tons of plant for workshops have been sent from England, and large numbers of skilled mechanics from England, India and elsewhere.

Port of Basra.

41. Up to October, 1914, Basra was a comparatively small commercial port, at which the arrival of two or three steamers was a full weekly allowance. Owing to a bar at Fao, only vessels drawing not more than 18 to 19 feet can reach Basra. It was largely a port of transit for Baghdad and other places up the river, to and from which cargo was conveyed by Messrs. Lynch Bros.' steamers or by mahailas. The equipment of the port was primitive and barely in keeping with the modest volume of its trade. There were no wharves for ocean steamers, and the merchants' warehouses were of small dimensions.

42. The facilities were, from the first, inadequate to cope with the needs of the Expeditionary Force, and to give reasonably rapid despatch to steamers bringing supplies. As the force grew, and as the line of communications and voyages of the river steamers lengthened, congestion at the port became greater. Administration of the port, direction of the mooring of shipping, provision of lighters or mahailas, and discharge of cargo overside, were placed in the hands of an officer of the Royal Indian Marine, under the Inspector-General of Communications. Reception of cargo ashore was in the hands of various military authorities, who each had their depôts, such as Supplies and Transport,

A. Shortage of River Transport.

Ordnance, Medical, &c. When traffic grew, accommodation for receiving and storing cargo ashore proved more and more inadequate. Most of the land round Basra was subject to flooding at the period of high river, but it was not covered deeply, and if foundations were raised, or the water kept out by earth dykes, stores were free from risk of damage. After struggling with congestion at Basra, a decision was ultimately come to late in 1915 to handle a portion of the traffic at Magill, situated about 5 miles above Basra. Here the depth of water permitted ocean steamers to come close in to the bank. By the aid of moored mahailas and planks, improvised landing stages were constructed, across which cargo could be carried from ocean steamers to the stores. At a later date, December, 1915—it was decided to construct proper wharves and otherwise improve the facilities of the port. These improvements were in progress during the whole of 1916. We have been informed that delays to steamers were at first occasioned, not so much by inability to get cargo out and placed in lighters or mahailas, as by inability or unwillingness of the military departments ashore to receive it with sufficient rapidity. It is clear that management of the traffic of a port and discharge of cargo was not work to which officers of the Royal Indian Marine had previously been accustomed. They found themselves at Basra with a task on hand of which they had had no experience, with an inadequate and inexperienced staff, shortage of labour, a port where the facilities ashore were of the most meagre description, and where traffic was constantly increasing and congestion becoming greater. We are told that at one time there were 40 steamers waiting to discharge, and that they lay in a line 8 miles long up and down the river. Small wonder that arrangements broke down, despite the willing efforts of the officer in charge. Much of the difficulty could have been avoided, in our opinion, if, from the first, someone accustomed to traffic management of a commercial port, and the handling of cargoes, had been appointed to assist. Men with these qualifications were known to be employed in one or other of the great Indian and Burmese river ports. Their advice was not asked for; and their assistance was not utilised until more than a year after the landing of the Expedition in Mesopotamia when conditions at Basra had become serious.

43. In the words of General Davison :—

I doubt whether the training of Royal Indian Marine officers specially fits them for high administrative appointments or the control of so big a charge as we have here (Basra). It demands the training of a shipping expert, with large commercial experience, or a traffic expert, such as the Manager of a big railway.

As some indication of the volume of traffic handled at that period, we have been informed that the number of troops and followers disembarked in Mesopotamia in the four months December 1st, 1915, to March 31st, 1916, was :—

Personnel, number	129,500
Animals ,, ...	33,000
Vehicles ,, ...	4,100
Cargo, tons	71,500

While officers of the Royal Indian Marine were struggling with conditions at the port of Basra, which were, in our opinion, beyond their powers, we cannot omit to notice that the general organisation of traffic was under the Inspector-General of Communications, who from April, 1915, to April, 1916 was General Davison. He was also responsible for matters connected with improvement of the port, such as the building of additional warehouses or the provision of additional wharfage.

44. General Gorringe stated in this connection :—

I have no doubt that great improvements could and should have been effected during the first 12 months, and so on in proportion afterwards. There was reluctance to spend money on improvements which would at all partake of a permanent character. No improvement in the unloading wharves for ships was made until December, 1915, when the reinforcements of two divisions were coming out. Then, and not till then, was that taken in hand. That is to say, that as long as we had only two divisions there, although the accommodation was bad and congested for stores of every kind being unloaded, no attempt was made to improve the facilities for unloading until the latter part of December, 1915, beyond making temporary stages and so on. There was no building of new wharves.

We think the criticism implied is justified, and that General Davison did not show that prescience and enterprise which the situation demanded, especially during the second half of 1915.

A. Shortage of River Transport.

45. In January, 1916, the Government of India sent Sir George Buchanan, a civilian who had been in charge of the Port of Rangoon, with a view to his becoming Director-General of the Port of Basra, and reorganising the traffic and facilities of the port. He did not receive any formal or definite appointment indicating the position he was to hold or specifying his duty, though a titular designation was given to him, viz., that of Director-General of Port Administration and River Conservancy. It was, unfortunately, left to Sir John Nixon to arrange with Sir George Buchanan, after his arrival, exactly what the duties of the position were to be. Differences naturally ensued. Sir George Buchanan's powers were so limited by Sir John Nixon, that the former considered his services were not put to their proper use. After a short stay he returned to India. Meantime his report on the conditions as he found them on arrival at Basra was communicated to Simla. In this he makes the following observations :—

> I found it difficult to realise that we had been in occupation of Basra for a year, as the arrangements for the landing and storing of goods and stores of every description were of the most primitive order, and, in the absence of roads, the whole area was a huge quagmire. To a new-comer appearances were such that troops and stores might have been landed, for the first time, the previous week. . . . The military expedition to Basra is, I believe, unique, inasmuch as in no previous case has such an enormous force been landed and maintained without an adequately prepared base.

46. About the middle of 1916 Sir George Buchanan returned to Basra, the port and traffic management was radically reorganised, and Sir George Buchanan was placed in full control. Since that time and since the War Office took over the charge and responsibility of the expedition, energy has been shown in building wharves, increasing the facilities, and generally making the port more capable of meeting the growing demands upon it. But these operations mean heavy expenditure and take time. Much of the material required had to be manufactured in England or the United States ; consequently it is not surprising that the improvement visible during 1916 was not more rapid. We find, however, that there has been marked and consistent improvement during the period June to December, 1916. We have been supplied with statements showing the time occupied by vessels bringing supplies for the Expeditionary Force from the time of their crossing the bar at Fao, inward bound, until they, having completed their discharge, passed outwards. It appears that the average number of days in port of each ship bringing supplies to Basra was-

Month.	Average number of Days in Port of Vessels bringing Supplies.
July	39
August	23
September	26
October	24
November	20
December	20

47. From the full statement given to us it appears that while the number of ships bringing supplies increased threefold during the six months, the number of days in port, as above shown, had considerably diminished. The improvement is manifest and commendable. It cannot, however, be considered that 20 days in port is a satisfactory rate of discharge. With ample lighterage, wharfage and labour, despite the bad climate, it should be possible to reduce the detention by another 10 days, and every effort should be made to accomplish this. A reduction of a further 10 days on the number of steamers now arriving per month with cargo would save the country over £600,000 per annum.

River Hospital Steamers.

48. Early in the Mesopotamia campaign when operations were on a minor scale and not very far from tidal water, there seems to have been no thought of special river hospital steamers. The need had not then been felt and was not foreseen. In February, 1915, a hospital barge, the " Bengali," was offered by Bengal and accepted, but foundered on the voyage. Replacement was not asked for. Between February and August, 1915, various communications passed between Mesopotamia and India concerning motor launches and

tugs to tow native boats called mahailas for removing sick and wounded. These arrangements concerned local or short-distance transport only. Sick and wounded were brought down river on steamers and barges which had taken up troops, animals or supplies. On August 13th, 1915, a special hospital steamer is mentioned for the first time. On that date Surgeon-General Hathaway made application to the Inspector-General of Communications at Basra for a steamer to be set apart and fitted for conveyance of sick and wounded, or alternatively a tug and two mahailas. The steamer and tug were refused on the ground that all were required for movement of troops and supplies, and Surgeon-General Hathaway did not carry the matter any further. Except some telegrams offering motor launches nothing further occurred until November 23rd, when India asked Mesopotamia if evacuation rom the front was satisfactory, adding :

" There should be a well equipped fleet of boats or steamers on the lines of a hospital ship to be used exclusively for the transport of sick. Have you any suggestion to make ? Wire what you require."

On December 7th Surgeon-General Hathaway replied approving the suggestion. On December 10th he telegraphed that local experience favoured steamers with independent paddles, towing a barge on each side. On December 31st India cabled London that four river hospital steamers would require to be built, and that plans were being sent. On March 1st it was finally settled that two should be built in England and two in Calcutta. Meantime India decided to improvise in addition several hospital steamers, and fit up barges from amongst those obtainable in India. The first hospital steamer on the river, the stern-wheel steamer " Sikkim," with accommodation for 144 cot cases, arrived at Basra about the middle of March, 1916 one year and five months after the campaign commenced, and three to four months after the battle of Ctesiphon, in which there were over 3,500 wounded. Owing, no doubt, to the complaints of what had happened at Ctesiphon, which were now spreading, the Indian Government during the first half of 1916, and the War Office after they took charge of the campaign during the second half, supplemented the provision largely. There were on March 1st, 1917, eight hospital steamers in Mesopotamia, four on the way, and twenty-nine on order, besides several specially fitted barges. It is manifest from this bare statement of the present position that the provision of hospital steamers was taken in hand much too late.

49. The awful sufferings of some of the sick and wounded during 1915 and the earlier part of 1916 caused by want of river hospital steamers have been referred to at length in another part of our Report.* Consideration of the evidence as to the causes of this want leads us to the following conclusions : General Nixon was responsible for advancing without sufficient river transport to meet all needs, which in turn involved inability to set aside special steamers to be fitted for hospital use. The outstanding importance of having such steamers before advancing does not appear to have been sufficiently realised by Surgeon-General Hathaway, or, if realised, was not impressed by him, as it should have been, upon General Nixon. Surgeon-General Hathaway showed little foresight ; even his small request of August 13th, 1915, for an improvised Hospital steamer or tug was not urged persistently or with sufficient emphasis. He never suggested building special hospital steamers. The suggestion came eventually from India. He failed to grasp the requirements of the situation. In the matter of river hospital transport the Commander-in-Chief in India showed solicitude and initiative, although too late. The absence of requests for hospital steamers from Surgeon-General Hathaway naturally prevented anxiety for a time.

50. Execution of orders for hospital transport was far from satisfactory. Mesopotamia had, after much insistence made it plain that steamers with independent paddles, towing a steel barge abreast on either side were the only vessels entirely suitable for the river. Nevertheless, stern-wheel steamers were sent which could not manœuvre with barges coming down stream at the narrow hair-pin corners. A number of the barges sent were built of wood and as they crushed in on collision with the banks, had to be replaced. The hospital steamers ordered in England were twin screw instead of independent paddles, as desired. The onus of making these deviations rests with the Director of the Royal Indian Marine at Bombay. It is difficult to find excuse for them, especially as there had been a similar experience with ordinary river craft a few months before. It always seemed that the Director thought he knew what was required better than those on the spot. Waste of money and delay were thus incurred.

* See Part X., paras. 57–63.

B. Railways.

51. We have already considered the manner in which the Indian Government dealt with inland communications by water. We now turn to the question of communications by rail. In August, 1916, Sir William Robertson, the Chief of the Imperial General Staff, informed the Committee of Imperial Defence: "As regards the question of communications the Committee is aware that India declined to sanction certain proposals for railway construction, and that in general operations were allowed in 1915 to develop without proper regard to the vital questions of supply and maintenance." The justice of this criticism on the Indian Government became apparent to us when we ascertained that two applications from the General Officer Commanding in Mesopotamia had been made to the Indian Government for the building of railways, that on each occasion the application was based either on the grounds of improving supplies or communications, and that on each occasion the application was not agreed to by the Indian Government.

52. The first mention of the desirability of a railway in Mesopotamia was made by General Barrett, then General Officer Commanding the Expedition, on February 28th, 1915. He wired to India:—

> I consider that the best solution for any advance towards Nasariyeh or even one or two marches beyond Shaiba would be a light railway. Once Nasiriyeh was reached, the railway would be much used for moving produce to and from Basrah. Thus, if it were once constructed, it would not only solve our supply difficulty, but would also tend towards pacifying the country.

In a subsequent telegram General Barrett explained that he had asked for the railway because he found it impossible otherwise to move any force larger than one brigade across the desert. On March 13th he sent in particulars of the route which he suggested the railway should follow, and added, "I recommend that personnel and material should be in Basra by May at latest, as I think it important that work should begin as soon as floods subside." So far as we can ascertain no action appears to have been taken by the Indian Government on this application, except that they instructed Sir John Nixon (who succeeded General Barrett in April, 1915) to report on the possibility of the employment of a light railway of which material for 137 miles was available in India. The Indian Government apparently did not attach importance to General Barrett's recommendation, although it was put forward on the military grounds of the desirability of facilitating supplies and communications and increasing the mobility of the force.

53. Owing to the flooded state of the country and other reasons into which it is not necessary to enter, it was not till the beginning of August, 1915, that Sir J. Nixon raised the question of railways with the Indian Government.

On August 2nd, 1915, he telegraphed to the Chief of the General Staff in India asking for particulars as to the 137 miles of light railway understood to be available. He asked if it was the railway—said to be very indifferent—which had been used at the Coronation Durbar.

He also wrote to tell the Chief of the General Staff that he did not want that material, but that he did want a railway. On August 11th, 1915, the Chief of the General Staff wrote to him that he had backed up his request for a railway, and had proposed standard light 2-ft. 6-in. material used by the North-Western Railway, and not the light military (Durbar) line.

On August 14th Sir J. Nixon forwarded to India a long despatch, supported by memoranda from his technical officers, in which he asked for a railway from Basra to Nasariyeh on (1) military, (2) political, and (3) commercial grounds. The military grounds were principally the necessity for quick communication between Basra and Nasariyeh. General Nixon added a demand for a suitable staff to carry out the preliminary work in October, and concluded—

> Finally it is most desirable that the general policy, as regards the railway, which I strongly recommend as necessary, shall be determined as early as possible and a decision communicated. Next cold weather, November to March inclusive, should be availed of to the fullest extent not only in preliminary investigation but in actual construction.

54. General Nixon's despatch reached Headquarters in India on August 25th, but as he had received no reply to it by October 24th, he then wired to India asking how the question of railway construction in Mesopotamia stood. He was informed on October 30th that the matter was still "under the consideration of the Government." A further reminder from General Nixon on November 1st at length produced a reply from the Chief of the General Staff, Delhi, on November 14th, that "for the present the Government

have decided not to proceed with the construction of the railway, on the ground of expense." Thus the Government of India's decision on Sir J. Nixon's application for a railway was not given until nearly three months after they had received his despatch asking for an early determination of the matter.

55. We have been unable to ascertain definitely the reason for this delay on the part of the Indian Government in dealing with so important an application from the General Officer Commanding the Mesopotamia Expedition. As the proposal involved considerable expenditure it was submitted to the Finance Department of the Government of India, but was not formally considered by Sir William Meyer, the Finance Member, until October 5th, when he forwarded to the Army Department the following note :—

"1. I confess to being somewhat sceptical as to the line being at all so remunerative as is at present represented, at any rate for some time to come. Apart from this too, it is perfectly clear that, in present financial circumstances, with which His Excellency the Army Member is acquainted, we cannot embark on large expenditure on such a project for other than the most urgent military reasons. We have already had to cut our coming railway programme in India to the quick, and may have to adopt other drastic measures to make both ends meet. Further, we have at present no right to act as if we were certain of getting Mesopotamia or a very considerable portion of it, after the war.

2. If, however, His Excellency the Commander-in-Chief and Army Member can definitely assure me that this project is absolutely necessary for the safeguarding of our military position, having regard, *inter alia*, to the time which the line must take to construct, I cannot, of course, resist a reference home on this basis. (In regard to the time factor, it must be borne in mind that, although the Railway Board think that the line might be built in from 6 to 8 months, we know from past experience that the best provisional estimates of this character are liable to get considerably exceeded in practice.) In that event it will be necessary, as Mr. Fell says, to indicate to the Secretary of State that the cost, as a military measure, must, under present arrangements, fall on the Home Government.

3. We should not, of course, in the telegram say anything about the contingency which Mr. Fell adumbrates, and which I think not at all improbable, of our having eventually to pay the full cost of the Mesopotamia operations, or at any rate a very large part of it. But this contingency adds to the necessity for caution in proposing expenditure which may ultimately fall upon India.

4. His Excellency the Viceroy should of course see before final action is taken."

56. On receipt of this note the Commander-in-Chief discussed the question with Sir Percy Lake, the Chief of the General Staff, who put forward a memorandum on October 26th generally favourable to Sir John Nixon's proposal, and in the last paragraph of which he said—

It would be imprudent, to say the least of it, not to refer this proposal to the Secretary of State and the Cabinet, upon whose decision would then depend the ultimate responsibility for our capacity to hold Mesopotamia, a problem in which the security of Nasariyeh is an essential factor.

Sir Beauchamp Duff's decision on this memorandum was conveyed in the following note :—

"His Excellency considers that when the occupation of Baghdad and the reinforcement of Sir J. Nixon's force has taken place the necessity for the immediate construction of a railway to Nasariyeh will have largely lost its force."

57. The full grounds upon which the Government of India rejected the proposal are stated in a telegram from the Viceroy to the Secretary of State, dated July 24th, 1916, to have been as follows :—

Basrah-Nasariyeh Railway.—The proposal to construct this line was put forward by General Nixon on military, political and commercial grounds. The large expenditure involved could not in our opinion be justified on either political or commercial consideration. We had not acquired the status in Mesopotamia which would justify such a charge upon Indian resources nor had we the right to act as if we were sure of retaining Mesopotamia or a large portion of it after the war. We had to consider whether the project was absolutely necessary for the safeguarding of our military position before we could recommend the construction of the line as a definite war measure, the cost of which would fall on the Imperial Government. Having regard to the facts that sanction had recently been accorded to the advance on Baghdad, which would, we hoped, attain its objective, in which case the Basra-Nasariyeh line would cease to be essential from the military point of view owing to our command of the Euphrates line, and after weighing the various considerations we arrived at the conclusion that the necessity for the immediate construction of a railway to Nasiriyah had to a great extent lost its force and that the advantages to be gained would not be commensurate with the cost of its construction. We therefore decided not to recommend the proposal and informed you accordingly, *vide* paragraph 3 of Lord Hardinge's telegram of the 14th November last, No. H.-9125. The various considerations which influenced our decision were not, however, fully stated in that telegrams.

We do not ourselves feel called upon to criticise the military arguments in this telegram, but we cannot help noting that when the War Office took control of the operations, they pressed for and ultimately built this railway preliminarily to the second advance on Baghdad.

B. Railways.

58. Moreover, if military considerations really entered so largely into the Indian Government's decision to refuse the railway, it was most unfortunate that both the Home Government and Sir John Nixon were, at the time, informed that the railway was refused on the ground of expense. This aspect of the matter is well brought out by Sir J. Nixon, who says—

> The difficulties of the Hammar Lake crossing were known in India, the extreme heat prevailing in the summer was known in India, the discomfort and suffering not only to the wounded but to fit men was known in India, and this proposal was rejected on the score of expense. This single instance seems to me to disprove the claim that the Finance Department has not exerted a sinister influence on the operations.

The refusal of the railway and the terms in which the refusal was announced were in fact bound to create the impression that the Indian Government were unwilling, in the interests of economy, to provide Mesopotamia with what was desirable in the interests of the troops.

Our conclusion is that the railway was refused because Sir Beauchamp Duff did not agree with Sir John Nixon's estimate of its military necessity and, apart from an assurance from the Commander-in-Chief that the railway was absolutely necessary on military grounds, the Indian Government were not prepared even to put the proposal before the Secretary of State, because they were afraid that the expenditure might ultimately fall upon India

59. In January, 1916, Sir Percy Lake (the author of the memorandum of October 26th in favour of the railway from Basra to Nasariyeh) had succeeded Sir John Nixon in command of the Mesopotamia Expedition. Sir Percy Lake was apparently so much impressed with the finality of the Indian Government's decision not to sanction the building of railways in Mesopotamia that he did not raise the matter until April, 1916, when specifically asked to do so by the War Office, who in the meantime had taken over from the India Office the control of military operations. Ultimately two railways were decided on in Mesopotamia, but it was not until the War Office took over the administration in addition to the control of the campaign in July, 1916, that the railways were really pressed forward with the vigour which the situation demanded. We think it would be inadvisable to go into details as to the exact position of the railway question at the present time, but we are satisfied that the War Office have taken and are taking all the steps which are necessary.

60. It is interesting to note that the cost of all the railways now being built in Mesopotamia is, according to the estimates, less than the cost of the river craft, and that if the railways had been authorised at an early date a portion of the river craft might have been unnecessary. Moreover, while it has required from one year to eighteen months to obtain specially built steamers, the railways have been completed in eight to nine months.

From this brief history of the railway question in Mesopotamia it is obvious that the Indian Government never paid to this vital matter the attention which the War Office considered so essential directly they became responsible for the military operations.

61. Although the railway from Basra to Nasariyeh was strongly recommended by General Barrett on February 28th, 1915, and by General Nixon on August 14th, 1915, the proposal was dealt with in a dilatory manner by the Indian Government, and was negatived by them in November, 1915, on the ground that it did not justify the expenditure involved. It was only when asked for by the third General Officer Commanding the expedition, General Lake, and under pressure from the War Office in April, 1916, that the Indian Government assented to the proposal, and awoke to the necessity of railways for the expedition. We feel that a grave responsibility attaches to the Indian Government for their failure to realise at an earlier date the importance of an energetic railway policy in Mesopotamia.

Conclusions as to Transport.

62. The enquiries we have made, and the evidence, both oral and documentary, which we have taken in this part of our investigation, lead us to the following conclusions regarding the critical period up to April, 1916:—

(*a*) From the first the paramount importance both of river and railway transport in Mesopotamia was insufficiently realised by the Military Authorities in India.

Conclusions as to Transport.

(*b*) A deficiency of river transport existed from the time the army left tidal water and advanced up river from Kurna. This deficiency became very serious as the lines of communication lengthened and the numbers of the force increased.

(*c*) Up to the end of 1915 the efforts made to rectify the deficiency of river transport were wholly inadequate.

(*d*) For want of comprehensive grasp of the transport situation, and insufficiency of river steamers, we find the Military Authorities in India are responsible. The responsibility is a grave one.

(*e*) River hospital steamers were an urgent requirement for the proper equipment of the Expedition, and were not ordered until much too late.

(*f*) With General Sir John Nixon rests the responsibility for recommending the advances in 1915 with insufficient transport and equipment. The evidence did not disclose an imperative need to advance without due preparation. For what ensued from shortage of steamers, General Sir John Nixon must, in such circumstances, be held to blame. The extent of his responsibility in relation to the sufferings of the wounded is considered in Part X. of our Report and in Part XII., paragraph 17.

(*g*) During the first four months of 1916, the shortage of transport was fatal to the operations undertaken for the relief of Kut. Large reinforcements could not be moved to the front in time to take part in critical battles. Based upon information received from General Townshend, as to the urgent necessity for his immediate relief, operations were undertaken, notwithstanding the extreme transport difficulty, but in all the circumstances we do not attach blame for this to the Generals in Mesopotamia directing the operations.

(*h*) Facilities for the discharge and handling of cargo at Basra, also provision of works for the erection and repair of river craft were hopelessly inadequate.

(*j*) Proceedings in connection with the filling of orders for river craft by the Director of the Royal Indian Marine in India, and the India Office in London, were far from satisfactory.

(*k*) Looking at the facts, which from the first must have been apparent to any administrator, military or civilian, who gave a few minutes consideration to the map, and to th conditions in Mesopotamia, the want of foresight and provision for the most fundamental needs of the Expedition reflects discredit upon the organising aptitude of all the authorities concerned. General Sir William Robertson, Chief of the General Staff, Whitehall, in a document to which we have already referred, states: "In general, the operations were allowed in 1915 to develop without proper regard to the vital questions of supply and maintenance," in which opinion our investigations lead us unreservedly to concur.

C. Royal Indian Marine.

63. It is not easy to describe with anything like precision the status and functions of the Royal Indian Marine Department. It is enough here to say that its position is not considered satisfactory by its present Director, nor by the late Secretary of State for India, Lord Crewe. The latter indeed informed us that he had been so impressed by the unsatisfactory position of the Marine Department that he had in contemplation changes in it when the War broke out.

64. The external communications of India have always been and still are sea-communications. No reinforcement from outside and no replenishing of military stores not produced in the country can reach India except by sea. It is evident that what may be called the maritime or marine side of the Indian Government should be strong, whereas it is admitted to be, and undeniably is, weak. This it will continue to be until a change is made in the status of the Marine Department.

65. In earlier days there was a regular Indian Navy, the officers and seamen of which were Europeans, the Marines—who were carried in the larger ships—being native Sepoys. This force was under the Bombay Government, and was called the Bombay Marine until the reign of William IV., who ordered it to be re-named the Indian Navy. Its reputation in both war and peace was high. Its headquarters were at Bombay. It remained in existence for some few years after the assumption of the Government of India by the Crown, and was then abolished.

C. Royal Indian Marine.

66. After an interval the Royal Indian Marine Department was created. It was not a naval force in the real meaning of the term. It was largely occupied in transport work, the movement of troops by sea. Its headquarters were fixed at Bombay, certainly the most suitable place for them. Some of the officers of the Department were detailed for duty at great Indian seaports, and worked under the local Governments. These officers do not deal with the traffic or with the loading, unloading, or quick despatch of commercial vessels.

67. The Royal Indian Marine Department is under the Army Department at the centre of the Government, and gets orders from it. At the same time the Royal Indian Marine Department sometimes gets orders from the Quartermaster General, who is a member, so to speak, of the Commander-in-Chief's Department. Occasionally also the Royal Indian Marine receives something very like instructions from the Indian General Staff. There seem, therefore, to be in effect three sources from which orders to the Director, Royal Indian Marine, emanate. The Military Secretary to the Government of India in the Army Department, when sending communications to the Director Royal Indian Marine, heads them " Marine Department," and these two words are the only indication that the Central Government in India has any direct connection with maritime affairs. There is no one at the seat of Administration with nautical experience or knowledge. The Director of the Royal Indian Marine was not granted—at any rate did not exercise—any initiative in maritime or nautical matters. He had, in his own words, to wait until he was told what was wanted.

68. The time of the Director and Senior Officers of the Indian Marine is much taken up with mere office or desk work. The amount of writing which they have to get through—or at all events do get through—can only be described as enormous. This involves intolerably long hours of work in an office when open-air activity and supervision are of much greater importance. Much of the writing work requires no maritime experience or nautical knowledge, both of which are often necessary in the case of open-air supervision when a great war is in progress.

69. The Director of the Royal Indian Marine gave to the Commission a list of the duties, the discharge of which he considered rendered it impossible for him to visit Mesopotamia and see for himself the actual state of things there. Most of the duties specified required neither maritime experience nor nautical knowledge, and could have been performed by any alert business man, even though he may have never been on blue water in his life.

We feel strongly that the Royal Indian Marine Department requires reorganisation with a view to giving its Director a higher status and a staff adequate to his work.

A. The Vincent-Bingley Report and its Principal Conclusions.

1. We have already referred to the fact that our labours as regards the Medical arrangements for the campaign have been very greatly facilitated by the report of the Commission appointed by the Government of India, of which Sir William Vincent was the Chairman, and Major-General Bingley, and Mr. E. A. Ridsdale were the members. We desire to acknowledge the thoroughness of their enquiry, and the proved accuracy of their account of the facts. It is a somewhat novel occurrence that the report of one Commission should by force of circumstances come under the immediate review of another, before whom those found wanting by the first Commission get the opportunity of criticising and replying to the condemnation passed upon them. We think Sir William Vincent and his colleagues are to be congratulated on the fact that practically none of their main conclusions are impugned; they are certainly not disproved. The vast majority of them, stated as they are with studious moderation, are admitted.

2. Sir Alfred Keogh indeed drew attention to the fact that the non-inclusion of a doctor on the Commission was doubtless responsible for a technical error as regards the numbers fixed for medical officers and medical subordinates in certain hospitals, which had led the Commissioners somewhat to over-estimate the paucity of doctors in the cases in question; the attention of the Commissioners had not been drawn to the fact that the authorised establishment of General Hospitals includes an allowance to enable casualties in action amongst medical officers to be instantly replaced. This small technical error does not, however, we are satisfied, vitiate the Commissioners' conclusions as to the undoubted shortage of medical personnel. We should add that Sir Alfred Keogh, speaking generally, said, "I think it is a good report."

3. Again, the Commissioners, speaking of the effect of the arrival of the 3rd and 7th Divisions from France, on the medical breakdown of January, 1916, say: "The medical establishment of the force was insufficient, before the arrival of these two Divisions, and this deficiency was accentuated by the fact that they were despatched from France in advance of their medical units." The evidence before us shows that the 7th Division fought in January, without the presence at the front of its own proper Field Ambulances. But as regards the 3rd Division, a letter from Major-General Keary, who commanded the Division, has been put before us which states:—

> It is clear that two out of five Field Ambulances of the 3rd Division were concentrated complete with all personnel and equipment at the front by January 19th, and were fully utilised in the fighting which took place on January 19th, 20th and 21st. At this time only three battalions, and one double company of the 3rd Division proper had arrived at the front.

The facts stated in this letter are supported by other evidence before us, and the obvious effect of this evidence is to increase the proportion of the blame attributable to the authorities in Mesopotamia for the breakdown in January. In the case of the 7th Division we do not attach blame to the British Military Authorities in France, who embarked the two Divisions at Marseilles in the belief that they would be disembarked and reorganised in Egypt. But this reorganisation did not take place, because later it was decided by the War Office to hasten their arrival at Basra.

4. We think it is remarkable that the conclusions of an enquiry of this nature and scope should, after almost meticulous examination, be only found liable to criticism in such obviously detailed matters. That these two cases should stand almost alone is an eloquent tribute to the value of the public service rendered by the Commissioners in their Report. Of course, there are points on which those censured differ from the Commission. In any case where the further evidence put before us seems to demand a qualification of the Commissioners' views, we have embodied that qualification in subsequent paragraphs of this part of our Report.

5. Accepting therefore, the value and importance of the report of Sir William Vincent's Commission (usually known as the Vincent-Bingley Commission, owing to the fact that Sir W. Vincent, and General Bingley were the two original members of it), we have printed the Report itself in this volume,* together with a memorandum by Sir Beauchamp Duff, Commander-in-Chief in India, criticising the procedure of the Vincent-Bingley Commission.

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* See Appendix I

A. The Vincent-Bingley Report and its Principal Conclusions.

We wish now to draw attention to the comments which the Commissioners made upon the following subjects.

Hospital River Steamers.

6. They state that :—

> The absence of any river steamers equipped for the transport of sick and wounded, and of any separate medical establishment for such vessels, ... has had more prejudicial results than almost any other defect in the organisation. It has constantly delayed evacuation, dislocated medical arrangements, and caused great suffering and injury. So long as the operations were confined to the immediate vicinity of Basra there was no need for any such transport, but directly columns advanced up the Tigris, Euphrates and Karun, the necessity of some means of speedily evacuating the sick and wounded by water became apparent.

They add later :—

> We are indeed forced to the conclusion that the necessity for an adequate provision of this kind of transport was overlooked both in India and in Mesopotamia, until the sufferings of the wounded in Ctesiphon made it apparent that some systematic steps must be taken to remedy the deficiency.

7. It is fair to say by way of comment on this that on November 23rd, 1915 –that is before the battle of Ctesiphon concluded- -a telegram was despatched from Army Headquarters, India, to Basra, pointing out the desirability of organising a fleet of Hospital River Steamers on the Tigris, but such an intimation came too late to be of any practical value, in meeting or easing the sufferings of those who were wounded in this battle, and in the retreat which followed immediately afterwards. Even acceptance from private donors of a hospital river barge, the "Bengali," in February, 1915, had failed to bring home to the responsible authorities the necessity for providing special river accommodation for the sick and wounded. On the loss of this barge on her way to Mesopotamia, nothing adequate was done to replace her. Surgeon-General Hathaway, who in April, 1915, became Principal Medical Officer in Mesopotamia, was, until August, 1915, of opinion that tugs and specially fitted "mahailahs" would be an efficient substitute, an opinion in which we do not concur.

8. We have stated our views at greater length in another part of our report* upon this subject of hospital river steamers, and therefore need not elaborate the point here, beyond pointing out that the use of the ordinary transport steamer which takes troops or supplies up the river can never provide a satisfactory means of bringing the sick and wounded down on the return journey. The sick and wounded require special fittings and appliances, and a crowded steamer going up with troops or supplies cannot find room for the storage of such things.

Medical Personnel and Equipment.

9. The Commissioners say :—

> Another difficulty of the first magnitude has been the inadequacy of medical personnel and equipment. . . . There was in our opinion no reason to think that the ordinary scale of medical units, as laid down in, "War Establishments, India," would not be needed. Experience has indeed shown that, if anything, that standard requires to be increased.

10. Our evidence shows that the organisation orders of Force "D" contemplated a lower establishment than is laid down for a frontier campaign and that the actual amount of medical personnel in Mesopotamia was during long periods far below even this meagre scale. But even had the full authorised establishment been provided and proved insufficient, the blame for such insufficiency would rest on the medical authorities in India, as medical establishments are not fixed by immutable laws, but according to the higher military authorities' estimate of what will actually be required on active service.

Hospitals.

11. As to hospitals, the Report says :—

> From the date [early in 1915] on which the 2nd Division came to Mesopotamia, the general hospita accommodation was insufficient for the needs of the force.
>
> There has been a consistent shortage in the personnel necessary to treat the number of sick and wounded. The deficiencies in Stationary and Clearing Hospitals have been equally great.

Land Transport.

12. The Commissioners speak of "the failure throughout the campaign to provide land ambulance transport for the wounded." They proceed "we consider this matter to be one of great moment, as it is proved that the defect has been the cause of intense suffering, and must have prejudiced the chances of recovery in certain cases."

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* See Part IX., paras 48–50.

A. The Vincent-Bingley Report and its Principal Conclusions.

Land Transport (conclusion).

The original organisation orders of Indian Expeditionary Force "D" did not include any wheeled transport for the sick and wounded. According to "War Establishments, India," each field ambulance should have been accompanied by 8 ambulance tongas, in lieu of which the original orders for this force allotted an additional number of riding mules.

We have no evidence that these riding mules were ever used by the wounded, though their presence on one occasion in a very restive state is recorded by a witness. They are obviously useless for serious cases.

13. The Commissioners continue :—

The omission to send wheeled transport was probably due to the fact that operations for some time were likely to be confined to the immediate neighbourhood of the Shatt-el-Arab. The history of the campaign shows, however, that very shortly after the capture of Basra the operations extended to a considerable distance from any river, and no satisfactory reason has been assigned for the failure to provide the ordinary form of land ambulance transport for these operations. It is in evidence that on many occasions during the campaign wheeled ambulances could have been employed. In fact, a few motors were used in the Ahwaz operations in April and May, 1915, and again at Ctesiphon in November, and ambulance wagons of the English pattern were employed with conspicuous success, to our own knowledge, in the operations up the Tigris in the beginning of April, 1916. But throughout the campaign the usual form of ambulance transport has been the army transport cart, that is, a small, springless cart made of wood and iron, drawn by mules or ponies, and ordinarily employed for the carriage of supplies. When the evidence of the suffering caused by this means of conveyance, particularly in cases of fracture and severe injury, is considered, it is difficult to avoid criticising the action of those responsible for this deficiency in severe language.

We entirely concur in this view.

We have been told that one or two motor cars were at the disposal of the General Officer Commanding after the battle of Kut, and in the advance to Ctesiphon. We feel strongly that a country which was practicable for cars for the General Officer Commanding was equally practicable for motor convoys for the wounded. By April, 1916, a few motor ambulances were in use at the front, and Sir Beauchamp Duff's evidence is to the effect that ten were at the disposal of Force "D." We do not think they were all in use at the front. On the other hand, telegrams before us show that the Turks had twelve available at the front. We do not think it is creditable that in this matter the provision by the Turkish Army, situated as it was, should have exceeded our own.

Medical Stores and Equipment.

14. The arrangements for the supply of surgical and medical stores and appliances to meet the requirements of the various units in Mesopotamia were, up to March, 1916, unsatisfactory. In the first place the system of supply, laid down in the Medical Manual (War), India, was ill-adapted to meet the demands of a large force operating 1,600 miles from India overseas. In the second place, owing to lack of river transport, there was such delay and uncertainty in the delivery of those supplies, that medical officers have frequently been hampered in their work.

For example, in the advance to Amara there was, if we are to accept the evidence given us, a shortage of drugs, including castor oil, epsom salts, emetine, quinine and supply of medical comforts, and the supply of lime juice and fresh vegetables was deficient.

We ourselves are convinced by the evidence before us that, though there was never any general shortage of drugs, dressings, etc., at Basra, yet these and similar medical necessities were on many occasions either in insufficient quantities or altogether lacking at the front, when the need for them was great.

15. As regards electric fans, the Commissioners say (reporting in May, 1916):—

A certain number of fans were put into the general hospitals at Basra last year, but these were not sufficient for all the wards, and none of the new hospitals there had up to the time of our leaving Basra been fitted with these fans.

16. As regards ice, they say :—

We are informed that ice was available for all the hospitals in Basra during the hot weather of 1915, but it certainly was not regularly available at Ahwaz, Nasariyeh or Amara, and up to the time of our departure so far as we are aware, Government had not supplied any ice manufacturing plant to any station outside Basra.

17. The Commissioners add :—

This is a somewhat serious matter, as ice is not a luxury, but having regard to climatic conditions, an absolute necessary for the treatment of the sick.

and we concur.

Preventive Sanitation.

18. On the subject of water supply the Commissioners say :—

Generally speaking, however, the only source of water supply at present is the nearest river, and we are not satisfied that systematic and methodical attempts are made to render this water potable and innocuous before it is used for drinking purposes.

A. The Vincent-Bingley Report and its Principal Conclusions.

This refers to the state of things at the base at Basra. As regards the state of things elsewhere we quote the following :-

> On the river steamers and barges which are utilised both for the conveyance of troops and the sick, the arrangements for the supply of good drinking water appear to us to be defective. On some of the vessels there are no water tanks. On some the tanks supplied are useless, and on many steamers and barges there are no arrangements for purifying the drinking water that is used by the troops. . . . Water supply arrangements at the actual front were also, until recently, far from satisfactory. The recent outbreak of cholera is attributed by sanitary experts to the failure to supply the troops with a sufficient amount of purified drinking water.

The Commissioners state, however, that the failure to supply a good water supply to the trenches was (at the time of their making their report) "being rectified."

Elsewhere in this Report reference is made to the lack of sweepers for sanitary work, and the fact that a number of those sent out were not of the proper caste. For a considerable time also the Commissioners record "the absence of any suitable machinery for disinfecting clothing and other articles," but they state that this had been recently supplied.

19. The above are merely small quotations showing the general tenor of the report and of the defects which it discloses in almost every branch of the arrangements for dealing with the sick and wounded, and the health of the troops. Full appreciation of the case presented by the Commissioners can only be attained by reading the text of their report.

20. We agree generally in the Vincent-Bingley Commission's historical account of the manner in which the foregoing defects affected the various phases of the campaign; but, as regards the early period up to the summer of 1915, we have amplified that account in other parts of this Report.*

Advance to Amara and Nasariyeh.

21. We agree that during May, June and July, 1915, in the advance to Amara and the operations round Nasariyeh, the first substantial lengthening of the lines of communications, the sick and wounded suffered considerable hardships. Hospital River Steamers had now become essential, and they were not even asked for. The general position can perhaps be best summed up in the words of one of our witnesses, Colonel Giffard, a senior officer of the Indian Medical Service who was in command of a hospital ship running between Bombay and Basra. He told us that up to June, 1915, "there was nothing either at Basra or Bombay that could be considered a breakdown," but that in May, 1915, it was "obvious to most of us medical officers, that even at Basra the breaking strain was nearly reached." He states that—

> The patients in the hospitals at Basra were not comfortable. The heat was almost unbearable, and they were largely housed in thatched sheds. I saw these sheds badly overcrowded, the attendants were too few, there was hardly any ice; electric fans, although offered by the Madras Fund in December, 1914, had not been installed, and in every way it was a poor performance.

First Battle of Es Sinn or Kut-el-Amara.

22. At the battle of Kut-el-Amara (September 28th, 1915), the medical arrangements were not satisfactory. The Field Ambulances were insufficient and overcrowded. The river transport used for evacuating the wounded was unsuitable. The steamers used were insufficiently equipped. Part of the battlefield was eight miles distant from the river, two motor cars were available, but otherwise severe cases had to be evacuated in Army transport carts, a most inefficient substitute for motor ambulance transport or the light pony tongas sent to Mesopotamia later. The hardships, in fact, of the wounded, who numbered over 1,100, were considerable, though not nearly as severe as in later actions.

Battle of Ctesiphon.

23. After the battle of Ctesiphon (November 22nd, &c.) we have no hesitation in saying there was a complete breakdown. The casualties (roughly 4,500 in a fighting force of 13,500) were heavily underestimated. Here again, the conclusions of the Vincent-Bingley Commission are abundantly supported by independent evidence submitted to us.

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* See Part X., B and C.

A. The Vincent-Bingley Report and its Principal Conclusions.

Battle of Ctesiphon.

24. They say that—

The medical establishment available on this occasion was inadequate to meet the demands made on it, and that the arrangements for collecting the wounded on the battlefield, and accommodating them, pending evacuation to the river bank, were far from satisfactory. It was very difficult for wounded men to ascertain where they had to go for medical aid, and when field ambulances and collecting stations were found, the supply of food, tents, blankets, hot water and any kind of comfort was insufficient. Further, owing to the shortage of medical personnel, many of the patients both in the field ambulances near the battlefield, and at the encampments by the river bank, did not receive proper treatment. There was some delay in evacuating the wounded to Laj, where the steamers to convey them to the base were moored, and it was not until the 25th that the last of the wounded were removed to this spot. In the meantime, many suffered from exposure, want of food and inadequate attention.

In the second place, save for two motor ambulances which were employed with great success, no proper ambulance land transport was provided for the removal of the wounded to the river bank. There were a number of steamers at Laj, some eight or nine miles from the battlefield, two only of which, however, had been in any way prepared for the reception of the sick. Many of the wounded were, it is true, able to walk or ride to the river bank, but for the conveyance of stretcher cases the two motors already mentioned, and ordinary transport carts, alone were available.

Thirdly, the lack of properly equipped river hospital steamers proved, as may be well understood, in the circumstances, disastrous.

The medical and subordinate personnel for these steamers, which was taken from field ambulances, was inadequate for the number of the patients. The supply of medical stores and appliances, and even of food, was in some cases insufficient. The arrangements for cooking the food were defective, and the personnel to distribute it was wanting. The arrangements for water-supply were unsatisfactory, the latrine accommodation was insufficient, and there were not enough sweepers and bed-pans for the necessities of those patients who could not struggle to the latrines. Finally, the wounded were huddled together as close as they could be packed on the decks, without beds or mattresses, and it was almost impossible for the medical officers to attend to them properly. In some cases the vessels had, moreover, been used for the carriage of animals, and it was impossible, in the time available, to clean and disinfect them.

Wounds which required dressing and re-dressing were not attended to, and the condition of many of the patients who travelled by these steamers was, when they reached Basra, deplorable. There the wounds of many were found to be in a septic condition, and in urgent need of re-dressing. In some cases bed-sores had developed, more than one patient arrived soaked in fæces and urine, and in a few cases, wounds were found to contain maggots.

Surgeon-General Hathaway admitted to us that the arrangements made "were absolutely inadequate," and that the "wounded suffered intolerable discomfort." Sir John Nixon when asked whether he dissented from the general proposition that the wounded did suffer very great hardships on this occasion replied "No, I do not dissent at all."

25. We shall comment later on the very different description of things telegraphed home to the Secretary of State at the time, but we would say here that, had the authorities in India or at home had any inkling of the true state of affairs at the beginning of December, special efforts might have been made at any rate to reinforce the medical personnel in Mesopotamia in view of future operations.

26. Full credit should be given to all concerned for the fact that the wounded were brought away in the retreat from Ctesiphon, and saved from Arab indignities and brutalities. At the same time, we believe that much of the sufferings of the wounded might have been avoided, if adequate forethought had been shown in the planning and preparations for the advance to Baghdad. For the actual arrangements on the battle-field Colonel Hehir was responsible. We have had the advantage (not open to the Vincent-Bingley Commission) of hearing Colonel Hehir's detailed evidence on the subject. Having regard to the inadequate means at his disposal we do not consider that his dispositions are open to serious criticism. We are of opinion, however, that he should have taken more vigorous steps to represent the shortages in medical personnel and equipment before both the battle of Kut and the battle of Ctesiphon.

Kut Relief Operations. January, 1916.

27. The medical arrangements during the January fighting, that is to say the battles of Sheik Saad, Wadi and Hannah, resulted in the most complete breakdown of all.

The fact that the 7th Division had not its proper complement of Field Ambulances, has already been alluded to, but though this may have been a contributory cause, it cannot be accepted as an adequate explanation of the breakdown.

28. The testimony of our witnesses allows no shadow of doubt as to the accuracy of the description of the facts in paragraphs 135 to 140 of the report of Sir W. Vincent's Commission. The Field Ambulances were so overcrowded that patient after patient passed through them without receiving medical attention or food. The river steamers were short of equipment, sweepers, orderlies, bandages, medical comforts, blankets, bedpans,

A. The Vincent-Bingley Report and its Principal Conclusions.

urine bottles, cutlery and crockery. Many patients got no treatment after the application of their field dressing until they reached Basra.

29. The Vincent-Bingley Commission state the main causes of the breakdown at this time as :—

(1.) The lack of proper hospital river steamers.

(2.) The lack of River Transport.

(3.) The insufficiency of the medical and subordinate staff and of medical stores and accessories, and

(4.) The weather conditions.

To this we would add a *5th* viz. :—The incorrect estimate as to the period for which General Townshend's food supplies would enable him to hold out, which caused General Aylmer to attack before his force could be organised complete at the front.

It was known when General Aylmer commenced the operations for the relief of Kut, that his columns were inadequately organised as regards transport, staff and, above all, that the medical complements were quite insufficient. Military exigencies were assumed to justify an advance in spite of these deficiencies, and it was with a full knowledge of such deficiencies that the advance commenced. The Vincent-Bingley Commission in their personal references to General Aylmer, acquit him of responsibility for these shortcomings. We concur with them. He was acting under peremptory orders, as time was then considered to be a paramount consideration.

March—April, 1916.

30. As regards the March fighting, we again quote and adopt from the report of the Vincent-Bingley Commission :—

For various reasons the medical arrangements for the evacuation of the wounded at the battle of Es-Sinn were much more successful than during the operations of January.

The arrangements were in many respects far from ideal, but we have reason to believe that the improvement was realised by everyone and much appreciated.

The main sources of discomfort were twofold, the use of transport carts for the conveyance of wounded by land, and the lack of river hospital steamers.

Subject to these defects, we think that the arrangements were satisfactory, and that great credit is due to the officers directly responsible for the collection and evacuation of the wounded.

31. Speaking of the battles between April 5th and 24th, the Vincent-Bingley Commissioners say that the—

" Arrangements were carefully thought out and proved very successful. The number of stretcher bearers was sufficient, the collecting stations were conveniently situated, and ample provision was made for the comfort and medical treatment of the wounded, who were promptly evacuated to the camp at Wadi by the " Aerial " motor boat, and in motor cars and ambulance waggons. The organisation was methodical and worked smoothly and the Commission saw nothing to call for unfavourable criticism in the arrangements made, save that the provision of more motor boats and of additional ambulance transport would have been a convenience."

They add,

" We think that the administrative and executive medical officers deserve great credit for the successful collection and evacuation of the large numbers of wounded in the almost continuous fighting which took place during this month."

We would add ourselves that the force had by this time profited by the experience of medical officers who had served in France.

Elsewhere we print a memorandum* handed in to us by Colonel Hehir which explains the medical arrangements made by him and his subordinates during the siege of Kut. They seem to us to have been excellent.

B. Medical Administration of Colonel Hehir in Mesopotamia.

32. It was only at a comparatively late period of their enquiry that the terms of reference of the Vincent-Bingley Commission were enlarged so as to include the earlier part of the campaign. Moreover, the chief medical officers responsible during the early period, Colonel Hehir in Mesopotamia and Surgeon-General Babtie in India, were not available as witnesses before that Commission. For these and other reasons the Vincent-Bingley Report does not deal, as fully as it might otherwise have done, with the medical arrangements for the Mesopotamian Expedition up to the summer of 1915. The indications which the Report contains as to these arrangements are, however, amplified rather than contradicted by the evidence which we ourselves have taken.

* See Appendix III.

B. Medical Administration of Colonel Hehir in Mesopotamia.

33. Colonel Hehir's able statement of evidence gives his official account of the medical arrangements during the period up to April, 1915, when he was principal medical officer in Mesopotamia. He has submitted to us his periodical reports to Surgeon-General Babtie in India and in the direction of sanitary and preventive medicine they display a watchfulness and foresight over the needs of the situation, which are in refreshing contrast with the administration of his successor, Surgeon-General Hathaway. Thus at the very outset of the campaign he calls attention to the crying need for a proper water-supply at Basra and does his best to grapple with the insanitary conditions in that town and elsewhere. He suggests and obtains spine-pads, tinted glasses, mosquito-nets, soda-water, &c., &c. He asks for a dentist and a bacteriological expert. He takes scientific measures to cope with a possible outbreak of malaria, and he warns the Indian Government against the danger of scurvy arising from the deficient ration of the Indian troops. He cables early in February for typhoid and small-pox vaccine and anti-tetanus serum, and by using the latter is able to report that there was only one case of tetanus out of nearly a thousand wounded at Shaiba. We consider that Colonel Hehir worked with zeal and on the whole with success: and he can take credit for a remarkably low rate of sickness in the force during the winter of 1914–15. But it is quite clear from Colonel Hehir's evidence, and from other sources, that many of the defects in the care of the sick and wounded, which afterwards proved so disastrous, were existent during the earlier phases of the campaign, and were only prevented from becoming conspicuous, by a certain combination of good luck and good management, which distinguished Colonel Hehir's administration.

34. The battle of Sahil, November 17th, 1914, was the first battle in the campaign in which the casualties were considerable. The medical experience of this battle indicated defects, which, if they had been appreciated and remedied in time, would have saved much suffering later in the campaign. The battle was fought before the full medical personnel had arrived, the personnel had been separated from their equipment by the embarkation officers at Bombay, some of the wounded were left out all night, and the absence of any hospital ship necessitated wounded being sent back to India in an ordinary transport, which had previously carried animals. But the comparatively small number of casualties and the energy of Colonel Hehir in dealing with them would seem to have minimised in his own mind, and in those of the authorities in India and Mesopotamia the serious nature of the defects disclosed at this battle. At any rate every one of these mistakes was repeated later in the campaign with disastrous results.

35. Colonel Hehir had been D.D.M.S. at Simla and had worked out with Surgeon-General Babtie the medical requirements of Force "D." He must therefore have been aware that no British Stationary Hospital accompanied the force and also that the British General Hospital was 50 beds below the standard scale. He knew too that by the end of March the force had been doubled in size, and brought up to the strength of two divisions without any additional Stationary, Clearing, or General Hospitals being provided, and he made no protest against the omission to provide such hospitals. Owing to the fact that it was the cool weather and that such fighting as occurred was spasmodic and not as a rule severe, Colonel Hehir was able to manage normally with the existing hospital accommodation without serious overcrowding. But even so, he was forced at times into such doubtful expedients as the use of transports as overflow hospitals, the borrowing of medical personnel from the field ambulances, and the use of field ambulances as General Hospitals. All these measures diminished the pressure on the hospitals and their staffs in a manner which would have been impossible in times of widespread sickness or continuous fighting. Unfortunately, however, his success in overcoming these difficulties led Colonel Hehir not sufficiently to realise the danger of allowing the original shortage of medical personnel and equipment to persist. He was content to "make do" with the low scale of medical personnel provided and such deficiencies as he represented were only in respect of shortages on that scale. He even acquiesced in the failure of the Indian authorities to send out with the reinforcements at the beginning of 1915 their proper complement of field ambulances and hospitals, and it was not till towards the very end of his administration as Principal Medical Officer that he appears to have begun to realise the dangers of the situation. It is an ironic comment on Colonel Hehir's policy that, in giving evidence as to medical administration in periods of stress under his successor, Surgeon-General Hathaway, he is again and again forced to criticise the perpetuation and development of expedients which he himself initiated in easier times.

36. A case in point is the non-provision of hospital river steamers. In his evidence

before us (after the event) Colonel Hehir says: "The absence of special river transport for sick and wounded was felt from the earliest stage of the campaign and this want became progressively more pronounced as time went on." Yet General Barrett, speaking of the period of Colonel Hehir's administration, stated to the Vincent-Bingley Commission: "I was never asked by any of my medical officers to apply for any river hospital steamers." The fact was that Colonel Hehir was content to overcome the difficulty by securing from the A.Q.M.G. (often only after much importunity) ordinary river boats for the transport of the sick on special occasions. When the number of sick was small, as under Colonel Hehir's administration, this was a possible expedient and Colonel Hehir was able, he assures us, to see that the boats were properly cleaned and sanitated before being used for patients. But such a system was bound to fail when there came a large increase in the number of patients and in the demands upon the steamers for ordinary transport purposes. And Colonel Hehir points out that "these steamers were always unsatisfactory" and that (in Surgeon-General Hathaway's time) "their absence became more felt as the number of sick and wounded increased and at the battles of Kut and Ctesiphon we were in consequence faced with difficulties which could not be overcome satisfactorily."

37. Another defect, which was evident, though not accentuated, under Colonel Hehir's administration was the failure to supply the expedition with suitable vehicles for carrying the wounded. The only land ambulance transport provided were stretchers and riding mules. Stretchers are not suitable for distances beyond 2½ miles, if for no other reason, because of the strain on and consequent failure of the stretcher bearers. This is a vital objection where, as in the Mesopotamian campaign there was often an actual shortage of bearers. Mules are, of course, impossible for severely wounded cases, and at one of the early engagements in the campaign (Rotah, January 20th, 1915) a R.A.M.C. officer informed the Vincent-Bingley Commission: "These animals were very restive and not suitable for wounded men to ride upon" with the consequence that the wounded, luckily very few in number, had to be carried back between 6 and 7 miles on stretchers. There were no motor vehicles available, except one or two provided from private sources. Consequently, whenever it became necessary to carry the wounded any distance, resort was had to the ordinary army transport cart (usually known as A.T. carts), which is thus described by the A.D.M.S. of the 3rd Division:

"The ambulance transport of these units consisted of the army transport cart, which is without springs; has no cover to give protection against rain or the direct rays of the sun; and the bottom of which consists of bars of iron which, even when liberally covered with mattresses or other padding, renders the placing of a wounded man, especially cases of fracture, in such a conveyance, a practice which can only be designated as barbarous and cruel."

38. Colonel Hehir himself recognises that the use of A.T. carts for the wounded "gives rise to a vast amount of suffering that would have been avoided by the use of suitable vehicles with proper springs." He did not, however, as Principal Medical Officer, apply for any wheeled ambulance transport, because, as he told us, he thought the fighting would continue to be on, or near one of the rivers, and also because from February to June, the country was likely to be flooded. Our comment on this defence is that battles near a river are, as was seen at Es Sinn and Ctesiphon, likely to extend further from the river than the distance for which wounded can be properly carried by stretcher. While, as regards the floods, it would not have been too early to apply in January for a special form of wheeled transport to be prepared for the time when the floods would subside in July. The fact was that in the earlier fighting in the campaign the number of the wounded to be removed a long distance was either very small as at Rotah, or else as at Shaiba the distance to be covered by wheeled ambulances was not very great. Colonel Hehir was, therefore, able to cope with the situation, either by using only stretchers, as at Rotah and Sahil, or by using padded A.T. carts to supplement the stretchers as at Shaiba. Thus, when he was Principal Medical Officer, we find him writing to the D.M.S. in India that the A.T. carts were "invaluable in transporting the wounded from the battlefield" at Shaiba, while later on, in his evidence before us, he frankly deplores having to use them (under the administration of General Hathaway) at the battles of Es Sinn and Ctesiphon.

In these and other instances, we think that Colonel Hehir was to blame for failing to requisition India for equipment, which, though not indispensable at the time, was certain to be indispensable in the future. It was a mistake to risk disaster before taking measures which ordinary foresight would have adopted long before.

C. Medical Administration of Surgeon-General Sir William Babtie.

39. But, whatever blame may attach to Colonel Hehir in not having made sufficient requisitions for the proper equipment of the expedition, the primary responsibility in respect of such equipment must, in our opinion, rest with the authorities in India. Up to the first week in June, 1915, Surgeon-General Babtie was Director of Medical Services in India. He is a man, both in experience and ability, above the average. He had previously been employed at the War Office, and had been "intimately connected" with the details of medical mobilisation He was considered of sufficient importance to be detached to Egypt in the Spring of 1915, in connection with medical problems which had arisen there; and in June of the same year need of his ability was experienced elsewhere in connection with the war, and he was recalled from India. Sir William Babtie must therefore have been well aware of the standards and requirements of modern warfare, and was to some extent in a position in India to ensure that such standards should be conformed to. In his own words: "The position of D.M.S. in India in relation to an expedition operating over the sea is practically the position of the War Office with regard to an expedition operating in France." We will now briefly examine how, in possession of this position and experience, Sir William Babtie carried out his responsibility for properly equipping the Mesopotamian Expedition in regard to medical requirements.

40. In one sense, the numerous sanitary and precautionary requisitions of Colonel Hehir, which we have already detailed, are a measure of Sir William Babtie's omissions. We have seen that during the first months of the campaign, Colonel Hehir was forced to wire to India for sun glasses, anti-toxin, mosquito-nets, spine-pads, &c., &c. Though it is true that Sir William Babtie was not technically responsible for the actual provision of all of these requisites, yet it is quite clear that they were essential to the maintenance of the health of the troops, and in our opinion Sir William Babtie should have made it his duty to have impressed upon the Quartermaster General's or other Departments concerned the necessity for providing well beforehand, these and other medical ancillaries in which the expedition is proved to have been deficient. He did not do this, with the result that many of these essentials did not reach the troops in sufficient time and sufficient quantities.

41. In regard to the rations of the Indian troops we consider that an even more severe comment should be passed on the Director of Medical Services' omission. In an official report to the D.M.S. in India dated April 8th, 1915, Colonel Hehir reports a small outbreak of scurvy amongst the Indian troops, and adds as follows:—

"I am of opinion that the present field service diet of Indian troops and followers has certain intrinsic defects, and it is suggested as desirable that the whole question should be reconsidered and the dietary in some respects reconstructed. An enquiry into the caloric value, vitamine content and anti-scorbutic attributes of the present dietary appears to be indicated. The only vegetable now allowed is 2 ounces of potatoes and the only fresh meat 28 ounces a week. It is very doubtful whether this authorised ration, if not supplemented by other vegetables and more meat, is sufficient to prevent scurvy. Cases of scurvy have invariably occurred whenever campaigns have lasted longer than four months, and the prevalence of the disease has then varied with the extent to which the ration could be supplemented by fresh vegetables and fresh meat obtained locally."

42. Sir William Babtie informed us: "As regards rations, I brought up the question of rationing the troops at the Commander-in-Chief's conference, and an additional ration to that which was hitherto in force for field service in India was sanctioned." We have not been able to obtain any confirmation of this assertion, and if the suggestion ever emerged from the phase of discussion into the reality of action, we can only suppose that it related merely to modifications of the extras which the Commanding Officer on the spot is empowered to sanction. It will be observed that Colonel Hehir's letter is an indictment of the whole constitution of the Indian ration. In the papers which have been laid before us by Sir B. Duff from the Quartermaster-General's branch in India it is definitely stated "Until March, 1916, no suggestion was made that for Indians the authorised ration was not entirely suited to the conditions of Mesopotamian Service," and we gather from the same document that the ration had, prior to that date, remained unaltered since it was slightly modified in 1912. If Surgeon-General Babtie, with the knowledge that he must have had of the proneness of Indian troops to scurvy, had authoritatively pressed Colonel Hehir's suggestions upon the Commander-in-Chief and the Quartermaster-General in India, it is difficult to suppose that a general improvement of the Indian ration would not have been sanctioned. As it was, the ration remained generally as fixed in 1912, and though some additions were made in May, 1916, in the summer of the same year a very serious outbreak of scurvy occurred amongst the Indian troops in Mesopotamia, resulting in some

7,500 men being lost to the force in 19 weeks. This epidemic was definitely ascribed by a War Office Sanitary Commission to deficiencies in the Indian ration.

43. The failure to insist on necessary precautions against so obvious a danger is, in our opinion, a very good instance of the kind of responsibility which attaches to Sir William Babtie for not having originally foreseen, and afterwards kept a proper oversight over, the health needs of the troops.

44. But the gravamen of the criticism which we feel bound to pass on Sir William Babtie is that, knowing the Army Medical Service in India to be organised only for frontier warfare, knowing the provision of the field ambulances and hospitals to be deficient, and knowing the medical personnel to be insufficient, he yet made no adequate efforts to improve these defects so as to equip the Mesopotamian Expedition in a manner suitable for campaigning in an unhealthy, tropical climate against an enemy, who was in alliance with and supported by the foremost exponents of modern warfare.

45. We will now proceed to examine to what extent Sir William Babtie was responsible in connection with the three main medical defects in the campaign, viz.: (1) Personnel; (2) River hospital transport; (3) Land transport for the wounded.

Personnel.

46. The Indian authorised scale of medical personnel was calculated for the needs of frontier warfare, where casualties were not likely to be large and the resources of India were close behind. But Surgeon-General Babtie despatched Force "D" eighteen hundred miles from its base, with medical personnel short even of the authorised scale. When reinforcements were sent he took, or acquiesced in, measures which even further reduced this exiguous scale, so that in the words of the Vincent-Bingley Commission "whereas the force was increased to two divisions *plus* a cavalry brigade, the medical establishment was, save for the addition of seven sections of a field ambulance, that which had been thought necessary for one division only." And Sir William Babtie himself admitted to us that each division was only supplied with twelve sections of field ambulance instead of the proper complement of twenty.

47. As regards hospitals the position was equally bad. The strength of the Force was doubled during Sir William Babtie's administration, but no additional hospitals whatever were sent over by him. Attempts were made to meet the deficiencies locally by expanding the existing hospitals in Mesopotamia. On April 22nd, Colonel Hehir informed Sir W. Babtie, that the British and Indian General Hospitals had been thus extended from 250 to 350, and from 600 to 1,000 beds respectively. No additional personnel was despatched by Sir W. Babtie to meet these extensions, and in response to demands for it, Mesopotamia was even told to obtain personnel from the Field Ambulances' Staffs, which, as we have shown, were already gravely deficient. The additional equipment required was not all in Mesopotamia even as late as October, 1915. The hospital expansions were in fact, in Sir W. Babtie's time, to a large degree merely "paper expansions."

48. The medical position was, therefore, obviously a highly dangerous one It has been justified by Sir William Babtie on the ground broadly that it was necessary to economise in Mesopotamia in order to provide for the medical needs of forces mobilised in India for internal defence. We have examined the memorandum on this subject prepared by Col. Hendley, A.D.M.S., about a fortnight after Sir W. Babtie's departure from India. From this document, the gist of which was telegraphed to the Secretary of State on July 3rd, it would appear that all the medical personnel was at that date retained in India, which was necessary for frontier and internal defence and that there was a small margin over. We are not convinced that the policy of preparing for possible warfare in India at the expense of actual warfare in Mesopotamia was justifiable. But even if this be conceded as a justification for allowing Mesopotamia to be severely understaffed in medical personnel, it was, in our opinion, clearly the duty of Surgeon-General Babtie to impress on the authorities in India and at home, the dangers of such a proceeding and to have urged strongly upon the authorities in India that they should apply to England for assistance. This he does not seem to have done, and it is noteworthy that the first demand for assistance from England was sent almost immediately after Sir William Babtie's departure from India, and was promptly complied with, although the Home Government was only given a very misleading account of the actual deficiencies in medical personnel in Mesopotamia.

C. Medical Administration of Surgeon-General Sir William Babtie.

River Hospital Steamers

49. In his examination before us Sir William Babtie agreed that in a campaign of this kind, if casualties on a considerable scale were certain and the only transport along the river, the authorities on the spot ought to have pressed for special river hospital accommodation. We are of the opinion that in such circumstances it, to a certain extent, devolved upon Sir William Babtie himself to have suggested and asked for the provision of such river hospital steamers. His defence for not doing so is, we gather, that he was not aware that there was any intention of an extensive campaign up the rivers, and that his preparations were made for a campaign limited to the conquest and retention of Basra and the oil fields. He told us that he was not informed of Sir John Nixon's instructions and that " if there had been a hint of Baghdad the arrangements would have had to be absolutely put into the melting-pot." He was also unable to recollect being told of the actual advance to Amara. Subsequently, however, under cross-examination, he admitted that he knew from hearsay that both Amara and Nasariyeh were necessary for the defence of Basra and the oil-fields. It does not, therefore, appear to us that he can escape all responsibility for not having suggested the provision of this necessity in what he knew from the outset to be more or less a riverine campaign. The extent of his activities in this direction was a suggestion of, or acquiescence in, a proposal made by a voluntary association to provide and equip a hospital river barge. When this barge sank on its way out to Mesopotamia, Sir William Babtie took no further steps in the matter beyond offering one motor launch also provided by voluntary effort.

Land Transport.

50. His attitude in regard to land transport for the wounded was hardly more satisfactory. The only such special transport provided under the Indian organisation consisted of stretchers, riding mules and ambulance tongas, which are vehicles drawn by bullocks. When the equipment of the expedition was being considered tongas were ruled out by Sir William Babtie and the staff at Simla as being unsuitable for the country and Colonel Hehir was so informed. We have already dealt in a previous paragraph* with the inadequacy of stretchers, and riding mules, the only land ambulance transport provided with the expedition. It follows that army transport carts were the only vehicles available for the sick and wounded where land transport was necessary. We have received an overwhelming mass of evidence as to the inhumanity of using these carts for the wounded. Padding for them was not always available. In some cases dead bodies were even used as cushions. Even when padded they were cruel and dangerous for certain classes of wounded. All this must have been well-known to Surgeon-General Babtie, or might have been easily ascertained by enquiry or experiment. His only action in regard to developing a more suitable vehicle than the bullock-tonga was to ask the Maharajah of Benares to provide a special corps of pony tongas—none of which were, however, available in Mesopotamia till long after Sir William Babtie had left India. In addition, he sent one private motor ambulance to Basra in March and offered a second in April, which was curtly refused. The reason for this refusal has never been satisfactorily explained to us. Motor cars were used as ambulances just previously at Shaiba and subsequently both up the Karun and the Tigris. But in any case an unexplained telegraphic refusal of a particular motor cannot (any more than the failure of Colonel Hehir to ask for tongas after he had been told that they were not being sent) be accepted as relieving Sir William Babtie of his responsibility for not providing wheeled ambulance transport. Knowing it was not provided he does not seem to have even asked for any special report or made any special enquiries as to how the expedition were managing without it. Like Colonel Hehir, so long as no evident disaster or scandal arose, he was content to " carry on " with obviously insufficient equipment. Though the expedition must inevitably fight and push forward by land and by river, he provided no proper land or river transport for the sick and wounded. He was content to leave developments in this respect to the haphazard efforts of private benevolence, and he never pressed upon the Indian Government or the Quartermaster-General the necessity for an organised effort to modernise its out-of-date ambulance vehicles.

51. Surgeon-General Babtie's omissions in regard to the Mesopotamian Campaign are all the more remarkable because of his promptitude and firmness in pressing war-provisions on the Indian Government which were necessary for the overseas expeditions generally. Thus, on the outbreak of war, he urged the formation of a fleet of ocean hospital ships, the construction of hospital trains, and the expansion of the Army Bearer Corps. It may be that, as we have noticed in other phases of the expedition, Mesopotamia was in medical

* See para. 37 *ante*.

C. Medical Administration of Surgeon-General Sir William Babtie.

matters also regarded as a " small side-show " and did not for that reason receive proper attention to its special and unique requirements. At any rate and for whatever reason, Surgeon-General Babtie's administration was marked by serious faults, for which he must be blamed, and the importance of which cannot be minimised. But we recognise that the shortness of his experience as Director of Medical Services when the war broke out, and the fact that he had to work in an atmosphere very unfavourable to reforming innovation, must be regarded as diminishing the weight of the censure he deserves. He is undoubtedly a man of great ability, and having regard to all the circumstances, we desire to say that the faults of his administration were not, in our judgment, such as to prove him unfit for important responsible administrative posts.

D. The Misuse of Reticence.

52. Elsewhere in our report, we have discussed the effects of the campaign of economy in India.* We have seen how it tended to create an indisposition to put forward, or to press demands involving expenditure, and we have quoted and endorsed in general terms, the views of the Vincent-Bingley Commission in this connection. We now propose to detail from our own evidence a number of instances, in which there has been a failure to report to higher authorities serious defects in existing arrangements. In almost all these cases the reporting and remedying of the defects would have involved considerable expenditure, and possibly censure of the responsible officers. There is no proof that economy was the motive of the omissions to report. But economy, as we have seen, engendered a disposition to reticence, and when this was reinforced by the natural tendency in all men to avoid censure, we fear that there grew up a dangerous habit of concealment. In matters affecting the sick and wounded the want of frankness has painfully impressed us.

The Colaba Hospital.

53. Until 1916, practically the only Military Hospital for British sick and wounded in Bombay, was the Colaba Station Hospital. In May, 1915, allegations were made that this hospital was poorly equipped, and in response to a telegram from the Secretary of State, Sir William Babtie, then Director of Medical Services in India, visited and reported on the hospital. The gist of his report was telegraphed to England, and we give in full the telegrams on the subject.

Telegram from Secretary of State for India to Viceroy, dated May 26th, 1915.

1864. Allegations being made that Military Hospital at Bombay to which wounded from Persian Gulf are being sent, is unprovided with X-ray apparatus and otherwise poorly equipped. Please cable facts.

Telegram from Viceroy to Secretary of State for India, dated June 3rd, 1915.

H. 5304. Your telegram of the 26th ultimo, No. 1864. The station hospital at Colaba is equipped according to regulation, but much additional equipment for officers and men has been provided through the agency of funds, local and others. Arrangements were made some months ago for the provision of electric fans and light, but the supply has been delayed, owing to shortages of material. The number of X-ray apparatus available for military use in India is at present limited to one portable set per division, the rest having been sent overseas, fresh supplies indented for not having been received from home. The Sixth Divisional apparatus with the specialist is sent to Bombay, when convoys of wounded are expected, and in addition use can be made of the apparatus in the civil hospitals. Director, Medical Services, will visit Colaba within a week and the gist of his report will be telegraphed to you.

Telegram from Viceroy to Secretary of State for India, dated June 16th, 1915.

H. 5620. In continuation of our telegram of the 2nd instant, No. H. 5304. Surgeon-General Babtie inspected Station Hospital, Colaba, and confirms former report. X-ray apparatus and arrangements for X-raying patients previously reported. No risk of any failure in this respect. He has arranged officers' accommodation which will not materially affect soldiers. Cooking quite good and sufficiently varied, there were no complaints. Electric lights and fans should be working in a fortnight. Hospital well staffed with medical officers and nurses, but some shortage in assistant surgeons, nursing orderlies and menials, which, as far as present conditions allow, will be met. Director of Medical Services satisfied that all sick and wounded officers and men have been well looked after and well cared for in a good hospital, and, taken all in all, Colaba. Hospital is better found than the majority of station hospitals in India.

54. It will be observed that the failure up to date to supply electric fans and light is admitted. It is also admitted that X-ray apparatus is only sent to the hospital, when convoys of wounded are expected; but Sir William Babtie declares that in this respect " There is no risk of failure." A shortage of assistant surgeons and orderlies is also admitted, but there is a direct denial of any shortage of medical officers and nurses, and the concluding paragraph of the last telegram might easily be read as a denial of any other serious defects in equipment. Bearing these assertions and denials in mind, we will now quote

* See Part I. C and Part XI. D.

D. The Misuse of Reticence.

extracts from the evidence given to us by a witness, who was Surgical-Specialist at Colaba Hospital, between February, 1915, and August, 1916 :—

When I took over the surgical wards on March 1st, 1915, from an officer of the I.M.S. there were some twenty wounded officers and men in the hospital, which was, at that time, quite unprepared for the reception of acute surgical cases from overseas. The equipment of wards and operating theatre was quite inadequate. There was no X-ray installation. In fact, no apparent preparations had been made for establishment of the hospital as an overseas base, although the Mesopotamian Campaign had been in existence for several months.

No fresh batch of wounded arrived until May 10th, 1915, when those from the Shaiba engagement were admitted. On this date there was still a complete lack of preparation for the reception of wounded.

"There was a serious deficiency in ward equipment. During most of the time patients suffered from lack of sufficient air-beds, water-beds, ring pillows, and their treatment was hindered by lack of splints and other surgical apparatus, and by the impossibility of obtaining these necessaries in time to be of use."

"There was a serious shortage of medical personnel during the twelve months commencing March, 1915. This necessarily affected the care of the patients. . . . During the emergency in August, 1915, I was frequently obliged to perform operations in the wards, and to give the anæsthetic myself, in order to get through the work each day."

"The shortage of the nursing staff was a serious hindrance to the care of the patients during all of the most important periods. . . . There is no doubt that the patients suffered from this cause, and that the nurses were at all times overworked between February, 1915, and April, 1916. The difficulty was overcome as far as possible by the splendid service of those who were available. . . . . The inadequacy of the establishment of orderlies was a source of perpetual worry and inefficiency in carrying out the work. . . . I cannot condemn too strongly the behaviour of whoever was responsible for the disgraceful lack of efficient X-ray apparatus, when this was urgently needed. I have good reason to fully realise the trouble due to this deficiency, as it affected my work considerably. In February, 1915, there was no X-ray apparatus in the hospital. The wounded from Shaiba were radiographed by the Divisional Specialist in Electrical Science (Capt. Stephen, R.A.M.C.), who brought his field apparatus from Divisional Headquarters at Poona, and took it back there by order some days later. Capt. Stephen was, however, transferred to Bombay with his apparatus in June, 1915. There was no X-ray room, so a small ward was used as a makeshift, and here Capt. Stephen carried on this important work as best he could, with an apparatus that any modern hospital would have refused to contain."

The Captain Stephen referred to, himself stated in evidence before the Vincent-Bingley Commission, that many patients were not X-rayed, because of the inefficiency of the apparatus, and that although he had asked for a proper installation in July, 1915, no order for it had been sent to the makers by March, 1916. He had further been debarred from obtaining "tubes" from London, and although an insufficient number of inefficient tubes was ultimately supplied to him in India, he was informed by the Superintendent of the X-Ray Institute, Deh-Ra-Dun, that he was not entitled to them because they had not been indented for in 1914.

All these statements (with one exception) refer specifically to the date of Sir William Babtie's report or to the months immediately preceding it, and they therefore constitute a serious impeachment of that report.

55. With regard to conditions in the hospital, prior to Sir William Babtie's report, we have also the evidence of the Viceroy himself, who visited it in February, 1915. Lord Hardinge pointed out the deficiencies as regards electric light and fans, and told us that the cooking was dirty, and the food indifferent. He added that he felt it "so hard that the British soldiers and officers were so indifferently treated." As regards the state of the hospital after Sir William Babtie's visit, the Surgical Specialist before quoted, informs us that in August (when the wounded arrived in a very bad condition after the Nasariyeh fighting), and in December, 1915, the hospital became grossly overcrowded, and was infested with vermin, while the shortage of personnel was accentuated rather than diminished as promised in the Viceroy's telegram. We have also the evidence of Surgeon-General MacNeece, Sir William Babtie's successor, who visited the hospital early in July and considered it unsatisfactory. "Officers were crowded and badly done," he says in a letter to Sir Alfred Keogh, "and rank and file not much better," and his evidence before us confirms this description. He found it necessary to recommend improvements and alterations which involved considerable expenditure, although the calls likely to be made at the hospital had not increased since Sir William Babtie's inspection. The evidence shows that the Staff did their best, but notwithstanding this it is clear that Sir William Babtie's report was misleading as regards the adequacy of the Colaba Hospital arrangements.

First Battle of Kut.

56. Between September 26th and 28th, 1915, in and about the first battle of Es Sinn or Kut, General Townshend's force sustained some 1,300 casualties. Owing to insufficiency of Field Ambulances and personnel, a lack of wheeled transport and river steamers,

and a scarcity of blankets, the wounded in these engagements suffered very considerably. Some of the fighting units were without stretcher-bearers, and there was a lack of co-ordination in some of the medical arrangements. Wounded men were left on the field of battle all night, some of them being stripped, maimed and killed by Arabs. These defects were so well-known that they resulted in a telegram from General Nixon, in which he said, " I see no possible excuse for what I am forced to look on, as the most indifferent work done in the collection of the wounded." Colonel Hehir, who was in charge of the medical arrangements on the battlefield, officially explained that these incidents were largely due to shortages of field ambulances and transport. The matter must have been well-known to the D.M.S. in Mesopotamia, General Hathaway, who was actually at General Nixon's Headquarters when the explanation of the officers concerned was received. Moreover, some time after the battle, Colonel Hehir personally brought to Surgeon-General Hathaway's notice the shortage of field ambulances on this occasion. At the end of October, Surgeon-General Hathaway sent in to Surgeon-General MacNeece, D.M.S., in India, an official report dealing with this period. He sets out the casualties in the engagements in question, and comments on the small proportion of killed to wounded. But in the whole of his report there is no single word, which gives any inkling that there had been deficiencies in the medical arrangements or that anything untoward had happened.

Battle of Ctesiphon.

57. There are two methods of concealing a failure. The first is to suppress all mention of it. The second is to obscure its significance by the glare of a contemporaneous achievement. The first method was, as we have seen, used at the first battle of Kut. It was the second method which obtained after the battle of Ctesiphon, when the military success of withdrawing all the wounded in the face of a pursuing enemy diverted attention from the grave medical defects which were disclosed in the course of that operation.

58. We do not here enter fully into the details of the Battle of Ctesiphon and of the lamentable breakdown of medical arrangements which followed it. This is done at length by the Vincent-Bingley Commissioners and elsewhere in our own Report.* It will be sufficient to recapitulate that a tactical victory was turned into a strategical defeat: General Townshend was obliged to retire before superior forces with casualties amounting to approximately one-third of the force with which he entered into battle. Over 3,500 wounded had to be removed from the battlefield to the river bank, in some cases a distance of ten miles, without proper ambulance transport, and with an insufficiency of medical personnel, of food and of comforts, so that a large proportion had to make their way on foot in spite of their injured condition. When they arrived at the river, the available steamer accommodation was gravely inadequate. The wounded and weary men had to be crowded into steamers and barges without sufficient medical attention, appliances, or conveniences. Some of the wounded were disembarked at Amarah, but the majority went on down to Basra, a journey from the battlefield, which, in some cases, took as much as fourteen days, and the discomforts of which were aggravated for the wounded by the presence on board of many cases of dysentery and other sickness.

59. Thus the sick and wounded were put to great sufferings during the evacuation from the battlefield to the river bank at Laj, and also during the protracted journey down the river. Though the successful evacuation of the wounded in the face of a superior and pursuing enemy was a fine military performance, it was carried out in a manner which involved for the sick and wounded conditions of neglect, misery, and suffering, which were lamentable. Not a hint of this regrettable breakdown is to be found in the official report sent to England after the battle.

60. We are reluctant to describe the details of the condition in which many of the wounded arrived at Basra, on account of their sickening horror ; but we deem it necessary to quote one witness on this subject, because it brings home the appalling nature of the sufferings which were thus glossed over by the authorities. Major Carter, I.M.S., who was in medical charge of the hospital ship " Varela " at Basra, waiting for the wounded from Ctesiphon, thus describes the arrival of one of the river convoys :—

" I was standing on the bridge in the evening when the ' Medjidieh ' arrived. She had two steel barges without any protection against the rain, as far as I remember. As this ship, with two barges, came up to us I saw that she was absolutely packed, and the barges too, with men. The barges were slipped, and the ' Medjidieh ' was brought alongside the ' Varela.' When she was about 300 or 400 yards off it looked as if she was festooned with ropes. The stench when she was close was quite definite, and I found that what I mistook for ropes were dried stalactites of human fæces. The patients were so huddled and crowded together on the ship that they could not perform the offices of Nature clear of the edge of the ship, and the whole of the ship's

* See Part X., para. 24.

D. The Misuse of Reticence.

Battle of Ctesiphon (continued).

side was covered with stalactites of human fæces. This is what I then saw. A certain number of men were standing and kneeling on the immediate perimeter of the ship. Then we found a mass of men huddled up anyhow—some with blankets and some without. They were lying in a pool of dysentery about 30 feet square. They were covered with dysentery and dejecta generally from head to foot. With regard to the first man I examined, I put my hand into his trousers, and I thought that he had a hæmorrhage. His trousers were full almost to his waist with something warm and slimy. I took my hand out, and thought it was blood clot. It was dysentery. The man had a fractured thigh, and his thigh was perforated in five or six places. He had apparently been writhing about the deck of the ship. Many cases were almost as bad. There were a certain number of cases of terribly bad bed sores. In my report I describe mercilessly to the Government of India how I found men with their limbs splinted with wood strips from 'Johnny Walker' whisky boxes, 'Bhoosa' wire, and that sort of thing."

Were they British or Indian?—British and Indian mixed.

61. We do not wish it to be inferred that the conditions on all the river steamers reached this pitch of horror. The conditions, for example, in the "Blosse Lynch" and the "Mosul," two ships which on this occasion had been prepared beforehand for the wounded, though unsatisfactory, were probably superior to those in the "Medjidieh." On the other hand there is evidence that the conditions in some of the other boats were as bad as or worse than in the "Medjidieh."

62. We will now see how the evacuation of the wounded, resulting in such appalling conditions, was officially described by the General Officer Commanding the Expedition. We append two telegrams on the subject:—

From—Secretary of State for India
To—General Nixon, Basra.
Dated December 4th, 1915.
C. 243. On arrival wounded at Basra. Please telegraph urgently particulars and progress.
From—General Nixon.
To—Secretary of State for India.
Dated December 7th, 1915.

940/28/A. Your C. 243. Wounded satisfactorily disposed of. Many likely to recover in country comfortably placed in hospitals at Amara and Basra. Those for invaliding are being placed direct on two hospital ships that were ready at Basra on arrival of river boats. General condition of wounded very satisfactory. Medical arrangements under circumstances of considerable difficulty worked splendidly.

We have had great difficulty in ascertaining who actually drafted this telegram and was responsible for its despatch. Sir John Nixon, who was ill at the time it was sent, in his evidence before us stated that he had only a dim, if any, recollection of the circumstance, but he admitted having seen it the day after its despatch, and as it was sent in his name he accepted the responsibility for it.

63. Sir John Nixon has communicated to us a letter he has lately received from a member of the Staff in Mesopotamia, which states that this telegram was drafted by, and is in the handwriting of, Surgeon-General Hathaway, though it is not initialled by him, but by two members of Sir John Nixon's Staff, subordinate officers in the office of Major-General Cowper, then Deputy Assistant and Quartermaster-General of Force "D." Surgeon-General Hathaway told us that he had assisted in framing it. Major General Cowper stated to us that he personally had no share in the despatch of this telegram, and that he did not himself submit it to Sir John Nixon before his subordinates despatched it. These two subordinate officers seem to have accepted Surgeon-General Hathaway's authority as sufficient. It is impossible to believe that Surgeon-General Hathaway was ignorant of the condition and sufferings of the sick and wounded. He had been at Laj when the wounded arrived from the battlefield, and he had himself worked with great energy in embarking them on the steamers. He had also travelled down the river with the wounded and was, according to one witness, actually at Basra at the date of the "Medjidieh's" arrival.

Major Carter stated to us that he had insisted upon seeing Sir John Nixon in order that he (Sir John Nixon) might personally know of the condition of the wounded on their arrival at Basra in the "Medjidieh."

64. Sir John Nixon, Major-General Cowper and Surgeon-General Hathaway all assured us that the telegram was not despatched with the object of misrepresenting the state of things. Sir John Nixon informed us that at the time the telegram was sent his "thankfulness was great at having got the wounded down safely under circumstances of great difficulty without letting them be exposed to mutilation" by the Arabs, and that what filled his mind was the resource and unceasing efforts of the medical officers to alleviate the sufferings of the wounded. Surgeon-General Hathaway said that he meant the latter

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part of the telegram as "a tribute to the people who had really accomplished a mos wonderful achievement." It is very difficult to accept these explanations, for whatever ma have been the motive for so wording the despatch, the effect was to conceal from th authorities outside Mesopotamia the real facts as to the medical breakdown in Novembe gravely to mislead the Secretary of State, and through him Parliament and the public and to deceive all into a state of false security in view of future operations. If the fu facts had been frankly reported immediately after the battle of Ctesiphon, it would hav been possible for the authorities to make strong efforts to remove or mitigate many of th defects before the next fighting took place. But this was not done, with the result tha for the wounded the horrors in January, 1916, equalled or even exceeded the horrors c Ctesiphon in November, 1915.

65. It is possible, of course, to assume that Sir John Nixon and Surgeon-Genera Hathaway's relief of mind on their safe arrival with the wounded at Basra may hav eliminated from their perspective the defects in medical arrangements, and the suffering of the wounded, which occurred during the evacuation. Yet even on this assumption, thes defects and sufferings should have been reported to the authorities when there had bee time to obtain reports from medical officers and from the wounded themselves, and thu generally to correct the first impressions of the evacuation. But nothing of the kind seem to have been done. On December 18th, Surgeon-General Hathaway sent in to th D.M.S. India a detailed report of the evacuation of the wounded from Ctesiphon Nobody reading that report would gather that anything untoward had happened, o that the wounded had undergone any special or avoidable sufferings. On Christma Day, General Nixon again wired to India, "Taking into account the large number of wounded, the very limited means at my disposal, the great difficulties entailed I am of the opinion that the evacuation of the wounded after the battle of Ctesiphon was extraordinarily well carried out." As late as January 4th, when Surgeon-Genera MacNeece had called his attention to the condition in which the wounded arrived a Basra, and to the complaints as to the defects in the medical arrangements, Surgeon General Hathaway persisted in regarding the evacuation as a "glorious achievement" which had received from Sir John Nixon the commendation it deserved.

66. The first, and so far as we know, the only official report, which disclosed th serious condition of the wounded after Ctesiphon, was sent in by an officer who was no in any way responsible for the arrangements for their evacuation from the battlefield t Basra. Major Carter, whose evidence we have already quoted, posted in Bombay o December 14th, his report on the third voyage of the hospital ship "Varela," addresse to the D.M.S. at Delhi. This report, which must have reached Delhi a few days later emphasized the grave condition of the wounded as they arrived at Basra, and ascribe this condition to the absence of river hospital-steamers. The report* gave also indirectl a vivid account of the sufferings of the wounded on their passage down the river. O the day on which it was posted, Surgeon-General MacNeece himself visited the "Varela," on its arrival at Bombay, inspected and questioned the wounded, and therefore knew i some detail of the medical breakdown after Ctesiphon.

67. The next day (December 15th), Surgeon-General MacNeece wrote a letter t Sir Percy Lake, Chief of the General Staff at Delhi. In this letter he described the suffer ings of the wounded. "The whole business," he said "is bad." He asked that thi letter should be shown to Sir Beauchamp Duff. But Sir Beauchamp Duff denies that h saw either this letter or Major Carter's Report; nor is there any evidence that he did Both documents were however accessible to him, and would doubtless have been furnishe to him if he had made enquiries in his own Headquarter Office about the condition of th wounded; and that there was reason for enquiry he knew, because Surgeon-Genera MacNeece referred to the sufferings of the wounded after Ctesiphon at a conference at whic the Commander-in-Chief was present on December 23rd. Surgeon-General MacNeece' recollection is quite definite on this point, and Sir Percy Lake, though unable to swear t the exact date of the conference, corroborates Surgeon-General MacNeece as to the fac that the matter was referred to in conference about that time. Moreover, private note made at the time by Surgeon-General MacNeece, though they do not specifically mentio the wounded at Ctesiphon, show that the affairs of Force "D" were much discussed at th conference on December 23rd.

68. Surgeon-General MacNeece also told us that the sufferings of the wounded afte

* See Part X., para. 89.

tesiphon were a matter of common talk at Delhi about this time. Though the events fter Ctesiphon were still unknown in England, stories were coming from home as to he general unsatisfactory working of the medical arrangements. The private letters f the Secretary of State to the Viceroy as far back as October had expressed anxiety n this point. On December 3rd, Mr. Chamberlain wrote: "I do beg you to urge Duff to go thoroughly into this matter," and suggested that a special officer should e sent out to inquire into all the medical arrangements in Mesopotamia. The Viceroy ressed the suggestion on the Commander-in-Chief and prevailed on him to consent. ir Beauchamp Duff's letter of December 30th we have quoted in full elsewhere.* He minimised the importance of the rumours that had alarmed Lord Hardinge. "My fficial reports," said he, "indicate nothing wrong except the shortage of river transport which we are straining every nerve to supplement, and even that has only become a urning question since "D" force began to grow larger." Such language cannot be ustified. Though the breakdown after Ctesiphon was due partly to shortage of river ransport, the reassuring impression given by this letter was profoundly misleading. The truth was partly known to Sir Beauchamp Duff, when he thus wrote; and if it was ot more completely known, this was due to his own neglect to enquire. He might have ead the Surgeon-General's letter to Sir Percy Lake and Major Carter's Report; and he dmits that "about the end of December," he heard that the medical arrangements were reaking down. In the circumstances to reassure the Viceroy, and to let the Viceroy reassure the Secretary of State was a grave dereliction of duty.

69. But in deference to the Viceroy, Surgeon-General MacNeece was now sent to Mesopotamia. He was instructed to "confer as to medical requirements" with Sir J. Nixon. This was not in terms a mission of enquiry into the past, and he did not so interpret it. "My business was with the future," he writes to Sir Alfred Keogh. At any rate, for whatever reason, he went only to Basra, and his report, unlike his letter to Sir Percy Lake, was vague and colourless. Meantime the rumours of the breakdown were continuing, and so were the anxieties of the Secretary of State and the Viceroy. In March, therefore, Sir Beauchamp Duff appointed Sir William Vincent and General Bingley as a Commission to enquire into the medical arrangements in Mesopotamia during and subsequent to the month of January, 1916. This limitation of their terms of reference would have excluded the breakdown after Ctesiphon. But at the suggestion of the Commission, their terms of reference were extended, and their striking account of the sufferings of the wounded after Ctesiphon finally enabled the truth to break through the tough veil of official reticence.

Medical Personnel

70. We shall refer in another connection to a telegram† sent by the Viceroy to the Secretary of State on August 16th, 1915. But this telegram so well exemplifies the evils of the system, we are criticising, that we would also direct attention to it here. The facts are as follows:—The expeditionary force had, as we have seen, been sent to Mesopotamia without a British Stationary Hospital, and the reinforcing Division which arrived in the spring of 1915 was unaccompanied by hospitals staff or field ambulances for two out of three of its brigades. In papers which he laid before us, General Duff states that owing to shortage of medical personnel it was, and had been, impossible to despatch these additional medical units. He seems to have thought that these units were not necessary until the advance to Kut-el-Amara was sanctioned; but he maintained that the deficiency at that date and the impossibility of meeting it ought to have been brought to his notice by Surgeon-General MacNeece. It is therefore admitted even by the Commander-in-Chief that on the date when the advance to Kut-el-Amara was sanctioned, *viz.* August 7th, 1915, there was a deficiency in medical personnel in Mesopotamia, which India could not make good from its own resources. Four days after that date, Mr. Chamberlain telegraphed to Lord Hardinge, a comprehensive enquiry as to the need of doctors, nurses, medicines, hospital comforts or anything else, in Mesopotamia. On August 16th the Viceroy replied, deprecating the need for assistance as regards any of these necessaries and added "My Government arranged for doctors and medicines." A more completely misleading estimate of the medical situation and of the shortage of personnel, etc., from which the Mesopotamian force was suffering, and about to suffer can hardly be imagined.

Shaikh Saad Hospital Camp

71. Surgeon-General MacNeece returned to India from Basra, and made his report to the Indian Government on January 27th. This report was submitted to us and we have

* See Part X., para. 93. † See para. 82 below.

also seen a later document dated February 16th from Surgeon-General Hathaway. In this latter document, which was presented to the Indian Government, occurs the following statement :

Shaikh Saad. The Meerut Stationary Hospital is under canvas here, under Major Goodbody, I.M.S., in excellent order, accommodating 607 cases, including 19 British ; 277 of these are suffering from dysentery of a mild type. This hospital is worked in a thoroughly efficient manner.

This is the only official reference Surgeon-General Hathaway made to his superior concerning Shaikh Saad Camp. Amongst the horrors connected with the medical breakdown, the condition of this camp up to January 18th, takes a foremost place. It is thus described by the Vincent-Bingley Commission :—

After the occupation of Shaikh Saad on the 9th January, about 2,000 of the wounded were moved to a new camp there, the remainder numbering 1,200 being left in a camp on the left bank of the river at Musandaq in charge of a small medical staff. The condition of the camps at Musandaq and Shaikh Saad have been described to us by various witnesses, and we are constrained to find that the arrangements for the accommodation and treatment of the wounded there were very defective The medical staff was so small that the wounds of many remained undressed for some days. The camps were in a very insanitary condition. The supply of surgical stores and appliances ran short, and there was practically no subordinate staff to see to the welfare of the patients. The suffering and discomfort endured by the unfortunate wounded in these camps were very great, and even up to the 18th January, when the Meerut Stationary Hospital took over charge at Shaikh Saad, this condition of affairs continued there. The Officer Commanding this hospital describes the condition of that camp in the following words :—" On arrival here we found about 195 British and 800 Indian sick and wounded in an irregular camp situated on filthy muddy ground behind the village . . . There was one Indian temporary I.M.S. Officer in charge of the Indians and he was ill. He had two sub-assistant surgeons and some of the personnel of an improvised cavalry field ambulance to help him. He had no dressings left, and many cases still had on the first field dressings which had been applied on the battlefield. About 200 of the patients had dysentery, and there were no proper latrine arrangements. The state of the camp was indescribable. Near the middle of the hospital tents was a pile of bags of atta, etc., mostly ruined by the rain, which I was told represented 10 days' rations."

72. This appalling state of things continued during Surgeon-General MacNeece's stay at Basra. Apparently not a word was said to him by Surgeon-General Hathaway as regards this condition of things. Surgeon-General Hathaway took the opportunity afforded him by the enormous improvement which Major Goodbody with the Meerut Stationary Hospital effected in the camp, and attempted to utilise it to cover up the shocking state of things which had previously prevailed. Unless the Vincent-Bingley Commission had reported, the state of this camp during the greater part of January would never have been known, and it is impossible to acquit Surgeon-General Hathaway of keeping back the unpleasant facts connected with this camp from the knowledge of the Indian Government.

Conduct of Surgeon-General Hathaway.

73. In connection with the withholding of information from Headquarters, we must explain that a very important medium of communication between the chief medical officer in Mesopotamia, and the Director of Medical Services in India was afforded by the demi-official letters which it was customary for the former to send the latter at frequent intervals. These communications were very regularly resorted to by Colonel Hehir, the principal medical officer in Mesopotamia upto April, 1915. But Surgeon-General Hathaway did not make proper use either of this means, or of more formal reports, for the purpose of keeping the D.M.S. in India *au courant* with the situation. In contemporary letters which have been submitted to us, and in his evidence before us Surgeon-General MacNeece complained several times of the manner in which he was kept in the dark by Surgeon-General Hathaway as to the medical needs and difficulties of the Mesopotamian Expedition.

74. Indeed, in our opinion, Surgeon-General Hathaway has throughout the campaign been the chief offender in the policy of suppressing the unpleasant. He failed to inform the D.M.S. in India of the often deplorable conditions of the hospitals at Amara and at Orah. He sent in reports as to the rations of the troops which induced India to believe that a plentiful supply of vegetables, fresh meat, etc., was available. We have not seen a single report by Surgeon-General Hathaway emphasizing the dangers of the existing inadequate methods of water-purification. In a formal report to the D.M.S. in the middle of February, 1916, he wrote : " All water for drinking and cooking purposes is of course got from the river. . . . This water is absolutely safe, the only precaution being necessary is the sedimentation of it as above referred to. The ' Wadi ' water is precisely the Tigris water and correspondingly safe." And he had previously referred to some defects in the process

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of sedimentation which he said were being rectified so as to meet all requirements. Barely a month later the Vincent-Bingley Commission were in the country and they report in strong terms of the inadequacy of the measures taken for purifying the water and the consequent danger to the troops. The evidence before us strengthens their criticisms and shows that the defects in water supply caused considerable illness in the forces and necessitated a large expenditure before it was remedied.

75. We are happy to be able to report that we can find no evidence that the want of frankness in medical matters continued after the departure from Mesopotamia of Surgeon-General Hathaway and General Nixon. We believe that Surgeon-General Treherne, General Lake, General Aylmer, and the other responsible officers all freely disclosed to Headquarters the medical defects and dangers with which they had to deal.

Resentment of Criticism

76. It is also our duty to draw attention to another unpleasant feature in the Mesopotamian Campaign, *viz.*, the active intolerance of all criticism of defects or suggestions for reform. Colonel Hehir was especially asked by Sir William Babtie, D.M.S. in India, to give Surgeon-General Hathaway the benefit of his experiences in the earlier phases of the campaign. At the outset, Colonel Hehir accordingly made suggestions to Surgeon-General Hathaway, but his action in this respect was so resented that he subsequently desisted from making even representations, which it was his obvious duty to have made. Major Carter who, as we have seen was the first to disclose the medical debâcle after Ctesiphon, endeavoured to bring to the notice of the authorities in Mesopotamia, the real condition of the wounded. On this account he was treated with great rudeness. Surgeon-General Hathaway, in writing to the D.M.S. in India on this subject says, "The Army Commander realising the injustice ordered the D.A. and Q.M.G. and myself to deal with him (Major Carter), with reference to his objectionable remarks." And General Cowper, then D.A. and Q.M.G., told us "I threatened to put him under arrest, and I said that I would get his hospital ship taken away from him for a meddlesome interfering faddist." In another part of our Report* we refer to Sir Beauchamp Duff's threat to dismiss General Cowper for sending to India too insistent demands as to the need for River Transport. Such incidents as these indicate the atmosphere of repression of complaints which permeated Indian officialdom, and do much to explain the unfortunate suppressions of truth with which we have dealt in this section.

E. Responsibility of Secretary of State, Viceroy and Commander-in-Chief.

77. The main responsibility for the medical arrangements of the Mesopotamia Campaign rests upon the Government of India and its officers. According to the division of function which was laid down by the Home Government, it was only the policy of the expedition which was to be decided in London; the management of the expedition was to be in the hands of the Government of India. We have commented elsewhere upon this division of function. But since, whether wisely or unwisely, it was adopted, it would be plainly unreasonable to criticise the India Office for the details of medical administration over which they attempted to exercise no control. But one general responsibility does belong to the India Office, or perhaps it would be more proper to say, to the Cabinet. Whatever preparations were made in England for a European war before August, 1914, no preparations were made in India. The Home Government and the Indian Government were agreed that the greatest military requirements for which it was necessary to make provision were those which might arise in defending the North-West Frontier, and maintaining the internal security of India. This policy suggested by the Indian Government was approved by Lord Crewe in a despatch dated March 20th, 1914. Overseas expeditions of a minor character might be undertaken, and the Indian Army was to be mobilised so as to make such a use of the Indian Army possible, but no additional expenditure was to be incurred in anticipation of such expeditions. Accordingly, when the European War broke out in August, 1914, it found the Indian Army organisation altogether unsuited for the purpose of such expeditions as that to Mesopotamia.

The Indian Government was prepared only for a campaign on the North-West Frontier against Afghanistan and the tribes, and to maintain internal security in India. On no

* See Part XI., para. 44.

E. Responsibility of Secretary of State, Viceroy and Commander-in-Chief.

part of the organisation did this limitation of function fall more hardly than on the medical service. In the all-important matter of medical personnel the establishment was kept below what would be necessary even for the mobilisation that was intended, because it was expected that it would be possible to obtain from England whatever additional personnel was necessary. The personnel was therefore short of the proper establishment, and the medical equipment was intended only for use in India and on its frontiers.

78. On the outbreak of the war, the Indian Government found it impossible to furnish the medical personnel required, and made no appeal to England for assistance in supplying it. It is true that they had in March, 1914, informed the Secretary of State of the deficiencies in medical personnel which would arise in case of mobilisation for war. Further in a telegram dated July 3rd, 1915, they called the Secretary of State's attention to their difficulties in meeting demands for medical reinforcements overseas, and also asked for sixteen R.A.M.C. officers in order to maintain Force "D" at its "authorised strength." The Indian Government never, however, explained to the Secretary of State that the "authorised strength" itself was gravely below what was required in Mesopotamia Nor was the Secretary of State himself in a position to appreciate this technical fact, inasmuch as, till the summer of 1916 he had no formal Medical Adviser at the India Office. Sir Havelock Charles was President of the Medical Board to the India Office, but he had no official status as Medical Adviser, and no administrative authority in regard to medical developments in Mesopotamia. Our evidence is that Sir Havelock Charles was not responsible for the medical telegrams despatched to Mesopotamia, and that these were, like other military matters, under the supervision of the Military Secretary, Sir Edmund Barrow, who had of course no special medical knowledge. The Secretary of State was unable therefore to give as much assistance and guidance to India in medical matters as he might have done if his office had been better organised. For this reason we welcome Mr. Chamberlain's appointment of Sir Havelock Charles as Medical Adviser in the summer of 1916.

79. The lack of preparation in India for a European war raises a larger question than concerns only the medical services and is dealt with elsewhere in our Report.* But in respect to the medical services, it is quite essentially important to realise that this lack of preparation made the medical equipment of the Mesopotamia Expedition from the very first scanty and deficient, a deficiency which grew more and more mischievous as the Mesopotamia Force became more and more numerous. Apart from river hospital steamers, the want of which had the most calamitous influence on the proper treatment of the sick and wounded, and apart from the lack of personnel, which ranks next in importance, there were other deficiencies in equipment, such as water-carts, operating-tents, ambulance transport and other necessaries.

80. During the whole of the first year of the campaign, that is, up to November, 1915, while there was no medical breakdown there was an increasing scantiness of medical provision, with regrettable hardship to the sick and wounded. The margin of security against breakdown was dangerously slight.

81. The responsibility for the general want of preparation at the outbreak of the war belongs both to the Home Government and the Indian Government. But the Indian Government, and particularly the Commander-in-Chief and his advisers, are specially responsible for not realising more completely that the medical provision intended for the North-West Frontier could not be sufficient or suitable for a campaign on the Tigris. Sir Beauchamp Duff in his evidence before us, put forward two main arguments in defence of his administration. He pointed out that the purpose and plan of the Mesopotamian Expedition were extended by the Home Government, by successive steps taken at very short notice, from an occupation of the estuary of the Shatt-el-Arab as far as Basra, to an advance to Ctesiphon on the road to Baghdad. The preparations which were sufficient or at least not disastrously insufficient for an expedition to Basra, were not sufficient for an expedition to Baghdad. But this consideration hardly serves as a defence for the Commander-in-Chief. The medical provision for the expedition was inadequate even from the outset, and it was the business of the Commander-in-Chief and his advisers to recognise and remedy this. Moreover, we had evidence that an advance even as far as Baghdad was known by the Commander-in-Chief to be a contingency as early as December, 1914, and each stage of the developments of the expedition beyond Kurna (which were precisely the developments which overstrained the scanty medical provision), were made not merely with his knowledge and consent, but as a result of suggestions by Sir John Nixon in which he con-

* See Parts I. C and XI. D

E. Responsibility of Secretary of State, Viceroy and Commander-in-Chief.

cured. Secondly, Sir Beauchamp Duff argued that he met whatever demands came from Mesopotamia. This is not quite true, but if it had been, more than this was required of him and his advisers, the Directors of Medical Services, who successively held office under him. Their passive attitude was really negligent. To receive demands, to discuss them by correspondence, to do little or nothing except slowly under the propulsion of Mesopotamian requests, were not the right methods for meeting a deficiency which was inherent in the scale of preparation and ought to have been vividly present to the minds of the Commander-in-Chief and his advisers. From the moment the Mesopotamian Expedition started, and more and more as it grew in size, the Military and Medical Authorities should have been not merely responding to demands, but making enquiries, offering suggestions, improving organisation, and enlarging equipment. But these things they did not do. To distribute the responsibility exactly between the Commander-in-Chief and the Directors of Medical services is not easy. The direct responsibility is with Surgeon-General Babtie and Surgeon General MacNeece, but however heavy it may be, the responsibility of the Commander-in-Chief cannot be light. He was their superior, and authority was in his hands. It is true that in regard to Surgeon-General MacNeece, he states :-

> I had personally warned him in July, in the presence of my Staff at Conference, to go thoroughly into the question of the adequacy of the Medical arrangements in Mesopotamia. He should have brought to my notice the demands which had been received, and the impossibility of meeting them.

But such instructions, though good, were not enough. It was the Commander-in-Chief's duty in dealing with a matter of such great and continuing importance to satisfy himself by an active supervision that his subordinates were not neglecting their instructions. He must share in the blame of the Military Authorities in India, justly assigned by the Vincent-Bingley Commission, who say :-

> We cannot, however, absolve the Military and Medical Authorities in India from responsibility for many of these deficiencies, in particular for the continuing neglect to supply the expeditionary force with that separate transport for sick and wounded, both by land and water, which the teaching of experience has shown to be essential in a properly organised enterprise of this character.

And to this it may be added that notwithstanding the extreme need of medical personnel in Mesopotamia the Indian Government retained in India a large supply of Medical Officers for possible need in case of a war upon the North-West Frontier, or of internal disturbances. Sir William Babtie and the Commander-in-Chief have both admitted that in this respect, priority over Mesopotamia was given to India. It appears to us that a distinction may reasonably be drawn between maintaining the necessary combatant forces to meet all internal contingencies in India and keeping up to full strength the medical services there. As between the potential claims of India and the actual claims of Mesopotamia in respect to medical provision, it appears to us that the Indian Government might have attached less weight to the potential claims of India and more to the actual need of Mesopotamia.

82. Until the beginning of 1916 the Indian Government seem to have been altogether unappreciative of the real insufficiency of the medical service of Force "D." This is shown by the correspondence that took place between Mr. Chamberlain and the Viceroy in the latter part of 1915. On August 11th the Secretary of State sent the following private telegram to the Viceroy :-

> "Private. Lord-Lieutenant of Hampshire enquires informally whether he can usefully raise funds for sick and wounded of regiments in Mesopotamia or India. Also whether voluntary aid societies can usefully help. Are doctors, nurses, medicines, hospital comforts required ? Anything else needed ? Please telegraph your reply."

Lord Hardinge told us in evidence that he showed this telegram to the Army Department and, he thinks, to the Commander-in-Chief, and that his answer was determined by the advice he received in consequence. The Commander-in-Chief had no recollection of the matter and suggested that the answer was framed on the advice of the Director-General of Indian Medical Services. But as Lord Hardinge definitely said that his answer was written by the advice of the Commander-in-Chief, and the Commander-in-Chief professed to no distinct recollection, we think it must be assumed that the Commander-in-Chief saw, and probably advised, Lord Hardinge's answer, the more so as they were constantly in communication and consultation about Mesopotamian affairs. The answer ran as follows :-

> "I much appreciate the thought which prompted kind offer of Lord-Lieutenant of Hampshire.* Having regard, however, to the heavy demands on charity which must arise elsewhere, I am unwilling at present to

* The offer was really on behalf of Lord Northbrook.

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take advantage of it. Much voluntary assistance is being afforded from private sources in all directions in India. Money is ample and sufficient for supplying comforts for sick and wounded in Mesopotamia and in India. Voluntary aid societies here are doing all that is necessary. Climatic and other conditions render it undesirable to employ personnel of such societies in Mesopotamia. Arrangements have been made to provide lady nurses from India, as it is considered that the climatic and other conditions permit. My Government arranged for doctors and medicines."

By way of comment on the last sentence, we would note that only a fortnight later, Surgeon-General Hathaway informed India of a deficiency in his authorised establishment, amounting to 17 medical officers, and 50 Sub-Assistant Surgeons, a deficiency which was never completely made up during 1915.

83. On October 9th the Secretary of State telegraphed again, expressing anxiety as to the health of Force "D" and especially about precautions in the hospitals against malaria and the general provision about tropical diseases. Lord Hardinge replied to the Secretary of State's telegram on October 15th, giving details of the precautions that were being taken in Mesopotamia against heat-stroke, malaria and dysentery. The information that was put at his disposal seems not to have been as complete as could be wished:

"Preventives adopted are purification of water by clarifying and boiling or chlorination, prophylactic issue of quinine, treatment of mosquito breeding places, supply to all troops, British and native, of mosquito nets. A sanitary committee for whole force has been formed. . . . British and Indian General Hospitals at Basra are provided with electric lights and fans and each bed has a mosquito net, but buildings are not suitable for use of gauze netting."

The water supplied in Mesopotamia at this time was very far from being satisfactory, nor was the provision of electric lights, fans and mosquito nets so complete as Lord Hardinge's telegram would suggest.

84. On October 14th Mr. Chamberlain wrote in a private letter as follows:—

"I am most reluctant to appear to convey to you or the Commander-in Chief any mistrust of the arrangements made by the medical authorities for the troops in Mesopotamia, but owing to reports which have reached me I felt it necessary to telegraph an enquiry as to the fulness of the precautions which had been taken. . . . I know that the difficulties must be great, and that it is impossible to foresee every contingency, but I trust that you will impress upon all concerned that in this matter of health they cannot take too many precautions, and that we shall not question expenditure required to safeguard the lives of our men."

85. On October 29th Mr. Chamberlain wrote again:—

"I continue to receive from Members of Parliament and others anxious enquiries about the health of the troops in Mesopotamia and the provision made for them. *Inter alia*, I have been sent a letter from some officer there in which he incidentally observes that my statement as to ice and other comforts provided at the base hospital 'was all eyewash.' I cannot go behind your assurance that all that is necessary and possible is being done, and you yourself are necessarily dependent on the reports of the military; but you will remember how we received the same assurances from military and medical authorities at the time of the South African War, and yet how much more might, after all, have been done—at any rate, in the early days of that campaign. As we must now look forward not only to a prolonged occupation of Mesopotamia, but to having increased numbers of troops there, I beg that you will take all the steps in your power to stimulate the ingenuity of the medical authorities in making provision for their health and for the comfort of the sick. No expense ought to be allowed to stand in the way of the best provision that science can suggest."

86. On December 3rd Mr. Chamberlain wrote again in very strong terms:—

"You know how anxious I am about the health of our forces in Mesopotamia. Apart from all feelings of humanity and the duty we owe to those who are giving their lives, men are too precious to be wasted.

"I wish to make all allowances for difficulties, perhaps only partly perceived by me, and not known to my correspondents, but I am very uneasy about the reports that reach me. . . .

"I beg you not to be content with easy assurances. On your advice, comforts, &c., are not being sent from here, and we shall have no defence if all that is possible is not done."

It is clear that these letters ought to have led to searching enquiries into the sufficiency of medical provisions in Mesopotamia.

87. As is natural at this distance of time, Lord Hardinge's recollection was not very distinct as to the precise steps he took in consequence of these communications from Mr. Chamberlain. But we have no doubt that he communicated to the Commander-in-Chief at any rate in substance, what Mr. Chamberlain had written. We are afraid there can equally be no doubt that the Commander-in-Chief and his staff did not respond to his representations with the zeal that the occasion required.

88. The only criticism to be made upon Lord Hardinge in the matter is that, wielding the supreme authority of Viceroy, he should have forced the Army Department to do more than it did. He wrote as late as February 18th, 1916, in a private letter to Mr. Chamberlain this significant sentence:—"I may mention here that I have at last succeeded

in convincing the military authorities that the medical arrangements up the Tigris are as bad as can be." This was, of course, after the calamitous events in December and January; and we think that it gravely reflects, not upon Lord Hardinge's good will or good intentions, but upon the manner in which he exercised his paramount authority.

89. The attitude of the Commander-in-Chief becomes vividly clear in connection with the terrible sufferings of the wounded in the retreat after Ctesiphon. He was at first naturally reassured by the very misleading telegram despatched from Mesopotamia on December 7th, on the character of which we have already commented.* But on December 14th, Major Carter, an officer of the I.M.S., who was in medical charge of a hospital ship plying between Bombay and Basra, sent to Surgeon-General MacNeece a Report in which, amongst much other matter, the following sentences occur:—

"These were all serious stretcher cases that had lain on the 'Medjidieh' for thirteen days after their first dressing on the field of battle. Their condition was grave, and the result of an unfortunate train of circumstances, the most serious of which was that *there is no distinct river service of hospital steamers used alone for the conveyance of our sick and wounded in Mesopotamia.* On the 'Medjidieh' alone 28 had died on the journey."

And:

"Deaths during the voyage total 14. It is now necessary to explain the markedly increased death-rate on this the third journey. In the first place, we carried a high proportion of the most serious cases of gunshot and shell wounds brought by the 'Medjidieh,' the 'P. 5,' the steel boats and smaller steel barges from the front.

"Unless one had actually seen the condition of the wounded on arrival, one could have had no accurate standard by which to judge the extraordinarily difficult position in which the medical personnel have been recently placed in Mesopotamia. For example, on the 'Medjidieh,' a small river steamer, it was necessary to crowd over 600 sick and wounded from November 24th to the evening of December 6th, 1915. The equipment of the field hospitals at the front had to be abandoned to the enemy, and there was practically nothing left with which to dress wounds or treat medical cases.

"Everyone seems to consider that it was extremely fortunate that they got away at all. The men were loud in their praise of the devotion to duty shown by many of the medical officers under heavy fire, both in the field and at the point of attack on the Tigris. *There is but little chance of recovery for men with severe gunshot fractures, who lie on the bare decks of boats and barges for 13 days, amid septic discharges, diarrhœa and dysentery, swept at night by a wind that dropped nearly to zero, without any protection against the cold, save their clothes and country blankets, which in the cases of total cripples were sodden with their own discharges and dejecta.*

"I write this to protect from hostile criticism by the laity the members of the medical services, who in these primitive boats and cattle barges have struggled for 13 days against the difficulties of a task that is happily exceptional in the war history of our Imperial forces. There is no shadow of doubt that the medical staff who accompanied these sick and wounded from Ctesiphon did all that lay in their power to help and tend their patients, but it was attempting to make bricks without straw."

90. This Report was despatched from Bombay on December 14th. On the next day Surgeon-General MacNeece, who was at Bombay and who had seen and fully conferred with Major Carter, wrote as follows to Sir Percy Lake, the Chief of the General Staff, in a letter marked "Private and Confidential":—

"My dear Sir Percy Lake,

"I was in time to see sick and wounded on board hospital ship 'Varela' when she arrived on afternoon of Monday, and their transfer to local war hospitals and up country by hospital trains.

"There were many serious cases, and some fourteen deaths occurred on voyage. Many of the sick British and Indian, particularly latter, were brought on board in a terrible condition. They had been 17 to 22 days coming down the river from Ctesiphon. Between Kut and Amara the steamers and barges were stopped by Arabs, and had to go back three times. Barges and steamers were crowded, sanitary measures were deficient or wanting, and the men, particularly Indians, lay on the deck suffering from dysentery, passing their motions under them, and getting large bed-sores. The whole business is bad. The medical authorities were only given sufficient steamers and barges to turn into hospital ships for 500 casualties (so I am informed); then, when the crash came, over 4,000 had to be got down any way.

"Will you kindly show this letter to His Excellency the Commander-in-Chief, and say that I have been to the D.R.I.M. and seen the plans for river hospital steamers, and fully approve of the one which is being forwarded to-day to Army Headquarters, Delhi, for approval, which should be given without delay."

Sir Beauchamp Duff told us that he had never seen Major Carter's Report; but as we have seen he was made acquainted with the substance of Surgeon-General MacNeece's letter to Sir Percy Lake at a Conference on December 23rd.‡

91. Meantime, correspondence was still going on between the Secretary of State and the Viceroy on the general question of the health of the troops in Mesopotamia. And at the same time rumours were beginning to be heard about the breakdown after Ctesiphon. Lord Hardinge wrote in a private letter to Mr. Chamberlain on December 31st:—

"I am very glad you wrote and told me of the rumours you have heard of unsatisfactory arrangements in connection with the health and comfort of your troops in Mesopotamia, for I am now, with your letter and

* See Part X., para. 62 *et seq.*

‡ See Part X., para. 67.

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the evidence it contains, able to put pressure upon the Commander-in-Chief, and also upon Sir J. Nixon, who keeps on reporting that everything is well. It is quite clear to me that all is not well, and I have urged the Commander-in-Chief to send somebody to Mesopotamia to perform more or less the same duties as those which you have explained to me had been carried out by Colonel Lee in Flanders."

92. Sir Beauchamp Duff was asked by us—

"In connection with another matter, you spoke of getting to hear that things were not going very well. At what sort of period did you get to hear through what may be called private channels that the medical arrangements were breaking down?—About the end of December, 1915, I think."

In answer to further questions, Sir Beauchamp Duff modified this statement by denying that he had heard anything in unofficial conversation. But he had seen a memorandum by Major Carter before the battle of Ctesiphon, and had in consequence telegraphed to Mesopotamia to enquire about the provision of hospital ships. Plans for this were indeed being discussed. Moreover, at the Conference on December 23rd he had heard Surgeon-General MacNeece's account of the suffering of the wounded after Ctesiphon.

93. Nevertheless, when the Viceroy pressed him to have a full enquiry made, his letter of December 30th, while assenting to the enquiry, shows in our judgment a very unfortunate spirit. This letter was the more important, because the reassuring impression which it conveyed was repeated by the Viceroy in a telegram to London. The letter of December 30th is as follows:—

"I will certainly have the whole matter enquired into and reported on."

"I am quite sure that in India itself and between India and Basra everything is right. The flow of stores, supplies, and comforts is regular and as complete as we can make it, any deficiencies that may exist being confined to articles for which we are dependent on England and the prompt supply of which we cannot always ensure. As to what happens beyond Basra I am dependent on official reports. The private complaints which Your Excellency mentions do not reach me. It is one of the drawbacks of military discipline that officers will not mention such matters either to me or my Staff lest they should be looked on as throwing blame on those under whom they have been serving directly. My official reports indicate nothing wrong except the shortage of river transport which we are straining every nerve to supplement, and even that has only become a burning question since "D" Force began to grow larger. I feel sure that everyone in Mesopotamia is doing his best, but our very long river line is necessarily a great handicap, and we cannot reproduce there French conditions which are due to good railways, good roads and abundance of motor transport.

"But though I will leave no stone unturned to get at the actual facts, I would ask Your Excellency to remember that the experience of previous campaigns shows that such complaints are very often exaggerated by officers making general statements which are really based only on some particular incident. There are also a good many cases where the fault lies with the complainant himself. For instance, Captain Bowring's complaint that on his voyage up the Tigris he and his companions were short of food is clearly one of these. It was the business of these officers themselves to draw their rations for the voyage before they left Basra. No Staff can dry-nurse officers who neglect such elementary duties."

94. This attitude of incredulity about rumours and complaints Sir Beauchamp Duff maintained and defended before the Commission. He was asked:—

"The point I wish to put is that for a considerable time, perhaps six weeks or two months, you were in possession of warnings—the Indian Government were, at any rate—coming from home, and yet your attitude was incredulous, although you had not made any very drastic inquiry into the matter?—Our attitude was somewhat incredulous, certainly."

and being further pressed, he said:—

"The reports come in. In every campaign I have seen in my life there are complaints. A large number of complaints come in, many of which are extremely frivolous. When such reports are sent to you anonymously and the names of the people who make the complaints are refused you attach little weight to them. The moment I get a report with a name I pay strong attention to it. I find going into these anonymous reports is simply a waste of time."

He was further asked—

"You would treat a letter from the Secretary of State or the Viceroy on that footing?"

and replied—

"Unless the Secretary of State or the Viceroy should supply me with the name of the person who made the complaint."

95. We desire explicitly to dissent from the position thus taken up by Sir Beauchamp Duff. It is, of course, perfectly true that a great many rumours are untrustworthy and a great many complaints unreasonable; and this untrustworthiness and unreasonableness form a very good ground for refusing to take administrative action merely because of rumours and complaints. But rumours that may be an insufficient ground for action may be a good ground for enquiry. They may be in themselves likely; they may come from several sources; they may recur again and again; or they may be brought to notice by

some person whose character and position ensure that they deserve attention. These obvious considerations seem to have been absent from Sir Beauchamp Duff's mind. Even in giving evidence before us he hardly seemed to feel the crushing significance of the fact that the rumours he disdained were true. It ought, in our judgment, to be deeply impressed on all men of high official authority, that obstinate and exaggerated incredulity about defects and failures in the administration, over which they have control, is in itself a serious and mischievous fault.

96. The language of Sir Beauchamp Duff's letter of December 30th to the Viceroy reads very unpleasantly in the light of our knowledge of the sufferings that the troops had endured after Ctesiphon. But it is difficult to say how far his blindness to the sufferings of the troops after Ctesiphon delayed the introduction of effectual improvements. All that it is safe to affirm is that since, when the truth was fully disclosed, improvement was slowly but gradually effected the sooner the full disclosure had been achieved, the sooner improvement would have begun.

97. The enquiry, to which Sir Beauchamp Duff at the instance of the Viceroy had assented, was first intended to be a mission entrusted to Lord Chelmsford and Surgeon-General MacNeece to go to Mesopotamia and look into the state of matters there. But when it became confidentially known to the Viceroy and Sir Beauchamp Duff that Lord Chelmsford was to be Lord Hardinge's successor in the Viceroyalty, it was naturally decided not to send him on a mission to Mesopotamia, but to send Surgeon-General MacNeece alone. The exact nature of his mission is not clear, but in any case it was no adequate fulfilment of Sir Beauchamp Duff's promise to the Viceroy that he would certainly have the whole matter enquired into and reported on, and would leave no stone unturned to get at the actual facts." Sir Beauchamp Duff's telegram to Sir J. Nixon as to this was in these terms: "Surgeon-General MacNeece is being sent to confer with you on the general question of medical requirements and sanitation of your force and the co-ordination of the medical requirements of other forces with those of Force 'D.'" These instructions seem to direct Surgeon-General MacNeece to consult rather than to make any thorough investigation. With this vague commission Surgeon-General MacNeece was sent to Mesopotamia in January, 1916. He did not go further north than Basra, and the enquiries made at Basra do not appear to have been of a very searching kind. Perhaps in consequence of his instructions the Report he sent in gave a very inadequate presentation of what had actually taken place. He said in evidence before us that he supplemented his report when he returned to Delhi by conversations with the Commander-in-Chief. However this may be, the upshot was that the Commander-in-Chief came to the conclusion that further enquiry was called for.

98. While Surgeon-General MacNeece's enquiry was going on matters were getting worse in Mesopotamia. The sufferings after the January battles were worse than those endured after Ctesiphon, and it seems that the rumours of what had been endured became stronger and stronger. At last it was decided to hold a new and more responsible enquiry and to entrust it to Sir William Vincent and Major-General A. H. Bingley. On February 22nd, 1916, Sir Beauchamp Duff telegraphed to Sir Percy Lake, who had taken over the command of the Mesopotamia Force, as follows:

> Terrible stories are being received here as to treatment of wounded after Sheikh Saad and later battles and total want of proper medical arrangements. I fear a serious scandal is impending and that I shall be compelled to send out a commission to enquire. It is imperative that all this should be improved before the next fight.

Accordingly the Vincent-Bingley Commission was appointed on March 2nd, but after all that had occurred it is surprising that its terms of reference should have been at first limited by the Commander-in-Chief, so as to exclude all enquiry into the Battle of Ctesiphon.

99. Our conclusions in regard to the responsibility of the India Office, the Viceroy and the Commander-in-Chief, may be summarised as follows:

(*a*) The Home Government agreed with the Indian Government in limiting the general military preparations of India before the war in the interests of retrenchment, and provision was accordingly not made for such an expedition as that to Mesopotamia. For the purpose of this part of our subject the importance of this policy lies in the consequent unpreparedness of the medical services in India, which was the original source of their failure in the Mesopotamian Campaign. Further, the deficient organisation of the India Office and the want of a Medical

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Adviser to the Secretary of State in our judgment hindered the India Office givin all the assistance that it might have done in the difficulties that arose. Since th management of the Mesopotamia Expedition was in the hands of the Indian Govern ment until it was transferred to the War Office, it does not appear to us that an responsibility for the medical services further than we have here stated rested with th India Office. We may add that Mr. Austen Chamberlain's communications to th Indian Government, so soon as he began to be aware that the medical provision fo the Mesopotamia Campaign was not adequate, are, in our judgment, admirable in ton and purpose. Had they been responded to in India as they ought to have been, th medical administration in Mesopotamia would have been improved two or three month sooner than it was. We only regret that these communications did not at any time take the form of a formal despatch to the Government of India which it woulc have been impossible for the military administration to neglect.

(*b*) To Lord Hardinge of Penshurst, as Viceroy, belongs the general responsibility attaching to his position as the head of the Indian Government, to which had been entrusted the management of the Expedition, including the provision of medical services. In regard to the actual medical administration he appears to us to have shown throughout the utmost good will: but considering the paramount authority of his office, his action was not sufficiently strenuous and peremptory.

(*c*) The Commander-in-Chief was responsible for the well-being of the Army in Mesopotamia. He should have realised early in the campaign the necessity of enlarging and improving the medical provision of the troops fighting in that country, and should have seen that his Directors of Medical Services carried out such a policy. His failure to do so seems to have been due to his preoccupation with other claims upon the military resources of India, and to his want of knowledge of the true state of affairs in Mesopotamia. This ignorance would have been removed if he had thought himself able to visit Mesopotamia itself, and would have been mitigated if he could have spent some time at Bombay. But he remained at Simla or at Delhi relying on official reports, and refused to believe in the Mesopotamian deficiencies. He failed to respond quickly and effectively to the alarm raised by the Secretary of State and the Viceroy in the autumn and winter of 1915, and to institute such enquiries as the case demanded. It is impossible to acquit him of a dereliction of duty in deprecating evil reports about the medical provision in Mesopotamia at a time when information was in his office which more than justified the deepest anxiety.

F. Supplementary.

Position since April, 1916.

100. Without going into too many details, we feel we should acknowledge the activities of the medical authorities during the summer of 1916. In India, on the departure of Surgeon-General MacNeece, Surgeon-General Sir Pardey Lukis, I.M.S., was appointed Director of Medical Services and held the post until (in accordance with the unwritten law that forbids a Surgeon-General of the I.M.S. to serve as D.M.S., India), Surgeon-General O'Donnell arrived to take his place.

101. Sir Pardey Lukis's term of office was one of energy—much additional hospital accommodation was provided, convalescent sections were established both for British and Indian troops, 16 stationary sets of X-ray apparatus were ordered for military hospitals in India, the provision hitherto being confined to mobile sets, five of which were now released for use in Mesopotamia; electric light and fans were ordered for several hospitals, and the status of Embarkation Medical Officers at Bombay and Karachi was improved. Final sanction was received for the increase of the Army Bearer Corps from 9,500 to 14,000. The Government of India was asked for the first time to purchase motor ambulance cars, instead of relying, as hitherto, on private donors.

102. Meanwhile, with an eye to things actually in Mesopotamia, additional staffs were despatched for river hospital steamers, active steps were taken to send increased apparatus for water sterilisation: a special "Mesopotamian" diet for British troops was drawn up and approved; additional river hospital steamers and barges were ordered from home;

designs were prepared for ambulance trains on the railways in Mesopotamia then being constructed; additional hospitals were asked for and despatched.

103. Altogether the energy displayed and the speed with which new proposals were carried through compares well with previous conditions.

104. As regards the state of things in Mesopotamia itself, it is evident that Surgeon-General Treherne, who succeeded Surgeon-General Hathaway as Principal Medical Officer to Force "D," dealt energetically and in a businesslike way with the problems facing him. The health records of the troops during this period show that there was much cause for anxiety, and that there was much disease, but this was met by good and systematic organisation. The work of the Army Sanitary Committee sent out by the War Office and supplementing that of the officers on the spot, has undoubtedly been valuable. Sanitation and the prevention of disease are now properly organised, and appliances of all kinds are being continually improved, as better transport facilities on the Tigris distribute the necessary machinery and apparatus. Altogether we believe that the public may be assured that a new spirit exists in the medical command in Mesopotamia.

Work of Executive Medical Officers.

105. There are two possible misapprehensions of this section of our Report which we should like to forestall. The first is that the severe criticisms and censures, to which we have been impelled, imply that the sick and wounded have been systematically and intentionally neglected. The very contrary is the case. We believe that, with the means at their disposal, and within the limits of their powers, the executive medical officers have unfailingly spent themselves in alleviation of the sufferings of their patients, and there have been but few isolated exceptions to this praiseworthy rule. When the disaster of Ctesiphon was upon him, Surgeon-General Hathaway, whose administrative capacity has been so seriously called in question by ourselves and the Vincent-Bingley Commission, took off his coat and worked strenuously at embarking the wounded. The trouble has been throughout failure to foresee, rather than failure to mitigate, disaster. Speaking of, perhaps, the worst period of the medical breakdown, the fighting in January, 1916, the Vincent-Bingley Commission say "the evidence before us abundantly proves that, generally speaking, the energy, kindness and industry of the executive medical officers . . . was beyond all praise." We endorse this encomium and would extend it to the whole campaign, in accordance with the consensus of the witnesses who have appeared before us.

Sanitary and Preventive Work in Mesopotamia.

106. Our second caveat is that we do not wish to be thought to belittle much good work done by the medical authorities in combating epidemics. Mesopotamia is a hot-bed of ravaging diseases. Plague, small-pox, cholera, malaria, dysentery and typhus, if not actually endemic, are always menacing in this swamp-ridden and unsanitated country. Each one of these diseases appeared amidst the forces, and any one might have decimated them. On every occasion the efforts of the medical authorities were successful in circumscribing the epidemic and limiting its incidence. These are not despicable results for a large force of British and Indian troops accompanied by a horde of oriental camp-followers and whose headquarters was a Turkish town of some 80,000 inhabitants. But the indictment against the authorities is not a lack of courage in dealing with disease so much as a lack of foresight in dealing with the predisposing conditions of disease. In such matters as water-supply, sanitation, diet, mosquito and sun-protection, &c., the evidence before both Commissions teems with instances of the failure to take up sufficiently early the weapons which existed in the armoury of modern science against the onslaught of disease. Our opinion is that, though the protection of the Mesopotamian Expedition against disease was by no means ineffective, it might and ought to have been a good deal better, if the matter had been earlier taken in hand on a proper scale. The vigour and scope of the sanitary and preventive measures found necessary by Surgeon-General Treherne are the sternest criticism of the omissions of his predecessor, Surgeon-General Hathaway.

We are aware that the rate of sickness was comparatively low in the summer of 1915 under Surgeon-General Hathaway, and that such sick-rate was greatly exceeded in the summer of 1916 under Surgeon-General Treherne. In this connection we must, however, remember that the increased aggregation of troops in Mesopotamia doubtless made the medical problems of the summer of 1916 more difficult and increased the liability to disease.

F. SUPPLEMENTARY.

In view of the unsuitability of the Mesopotamian climate for the purposes of convalescence the policy of shipping to India as many sick as possible was wisely pursued, though it, of course, increased the statistical total of men invalided to India. During the worst months of the hot season of 1916 a very large number of officers and men were thus invalided to India, though we are glad to say this high invaliding rate rapidly decreased as the weather became cooler. But in the battle against disease it is the preparatory work which tells, and if Surgeon-General Hathaway profited by the preparations of Colonel Hehir in the spring of 1915, so Surgeon-General Treherne was bound to suffer from any lack of preparations by Surgeon-General Hathaway in the spring of 1916.

Statistical Evidence of Colonel James.

107. In this connection we would refer to the able evidence tendered to us almost at the end of our enquiry by Lieut.-Colonel James, who was appointed Chief Staff Officer for Sanitation in Mesopotamia early in 1916. Colonel James produced an interesting series of statistics of admissions to hospitals for sickness in Mesopotamia in the year 1915-1916, and he compared these with similar statistics for previous campaigns in a manner which shows up in a most favourable light the result of the medical authorities' work in Mesopotamia. But we do not agree with Colonel James that he has adopted a fair criterion. The latest of Colonel James' compared campaigns was in 1904, the earliest in 1847. No science has leapt forward more boldly and rapidly in recent years than preventive medicine. Many of the prophylactic and sanitary measures against disease which are now a commonplace were unknown in these earlier campaigns, and they are not, therefore, a fair basis for comparison. In one sense, indeed, the heavier sick-rates of earlier campaigns might even be held to aggravate the indictment. We have shown that the Indian authorities did not provide sufficient hospitals, personnel and equipment for the actual number of patients. But if, as Colonel James would seem to infer, they ought to have expected a vastly larger number of patients, the omission to provide even for the lesser number is all the more reprehensible.

108. We do not, however, ourselves consider that the Indian Medical Authorities should have provided for, or be judged by, the sick-rates of ten or twenty years ago. The real test is whether the measures taken are considered satisfactory tested by contemporary standards. Colonel James' calculated rate of admissions to hospital for sickness in a year in 1915-16 is 1,550 per 1,000 of the average strength of the force. If we understand Colonel James correctly, this means that, *supposing no reinforcements had been sent*, in one year every man in the force would have been incapacitated by illness once, and more than half of the men in the force would have been incapacitated by illness twice. In other words, the preventive measures adopted would not have succeeded in protecting from disease a single man in the force. We cannot believe that this is a standard, which can be considered satisfactory, or that it could not have been improved upon by the adoption of earlier and more energetic measures. In this our opinion is amply confirmed by the Report of the War Office Sanitary Commission and the other documents referred to in para. 104 above. We might add that the backwardness and obstruction of the authorities in Mesopotamia in regard to medical and sanitary reforms is the main subject of Colonel James' own evidence before the Vincent-Bingley Commission.

Neglect to apply to England for Assistance.

109. We have already referred to* a despatch of March, 1914, from the Viceroy to the Secretary of State which shows that shortly before the outbreak of war the deficiency in medical officers in India on mobilisation was placed at 360 and of military assistant surgeons at 246. The figures quoted to us elsewhere do not always agree with these, but it is quite evident, and, indeed, admitted, that the full military force in India could not be mobilised for war without considerable medical assistance from home. The effect of this was seen in the deficiencies in hospitals, personnel and equipment which existed from the first in Mesopotamia and culminated in the disaster after Ctesiphon and Sheikh Saad. It appears to us, therefore, extraordinary that not only was assistance in medical personnel and equipment not asked for from England on a large scale during the first year of the operations in Mesopotamia, but that, as we show elsewhere,† in August, 1915, such assistance was actually refused by the Indian Government. The Viceroy informed us that no shortage was reported to him. But the deficiencies on mobilisation had been known to the Indian Government for years. The Commander-in-Chief and the D.M.S. appear to have been actuated by the belief that nothing could be spared from England. Some ground for this belief is afforded

* See Part X., para. 78. † See Part X., para. 82.

by the pessimistic tone of a demi-official letter from Sir A. Keogh to Surgeon-General MacNeece in August, 1915. But it can hardly be urged that so vital an omission by the Indian Government in a matter for which they were responsible can be excused on the grounds of chance expressions in a semi-private letter. Sir Alfred Keogh, who was Director-General of Medical Services, War Office, himself gave evidence before us that during 1916 all demands made upon him were met, and that he "could have complied with any demands made upon him at any time since the beginning of the Mesopotamian Expedition." Moreover, the only demand made to England for medical personnel before the battle of Ctesiphon (viz., on July 4th, 1915, for 16 R.A.M.C. officers) was promptly met, although the demand itself was couched in a form which gave no adequate indication of the deficiencies existing in Mesopotamia. We feel therefore that a grave responsibility rests with the Indian Government for not formally and fully placing the deficiencies in medical personnel and equipment before the home authorities and requesting assistance on an adequate scale.

Voluntary Aid from England

110. We note with satisfaction the anxiety of various non-official bodies to help in Mesopotamia, and our evidence testifies to the liberality of the British and Indian communities in India, the activity of the Indian Branch of the St. John Ambulance Association, and the good work done by the Indian Soldiers' Fund, and other bodies on similar lines.

Some of our evidence on this point suggests that offers of voluntary aid were not too well received, but Lord Hardinge strongly maintains the contrary view. One regrettable failure to profit from voluntary assistance there can be no doubt about. The joint War Committee of the British Red Cross Society and Order of St. John in London have been active in Mesopotamia since the beginning of 1916; on July 17th, 1915, however, they cabled to Sir John Nixon:—

> Can British Red Cross help in any way with hospital supplies for your force?

Acceptance was confined to two petrol-driven motor launches. The offer was repeated on December 28th, and a reply sent:—

> Nothing required at present. If anything needed in future will not hesitate to ask you.

A startling answer in view of the recent breakdown after Ctesiphon.

Shortage of ordinary River Transport and Extent to which it excuses the Medical Breakdown

111. There are passages in the evidence of Lord Hardinge, Surgeon-General Hathaway and other responsible witnesses which might lead to the inference that the medical breakdown in Mesopotamia was due to the shortage of ordinary river transport, for which, of course, the medical authorities were not responsible. If this were true, it would follow that the medical authorities must be relieved of blame for the results of the breakdown. We cannot agree with such a contention. No doubt the medical work, in common with every other branch of administration, was seriously hampered by the lack of river transport, and this lack may have been the immediate cause of some of the sufferings of the wounded on particular occasions, as, for example, when, early in 1916, it was found impossible to send up to the front with sufficient promptitude ambulances and transport which were actually at Basra. But many of the principal factors in the sufferings of the sick and wounded were not, or need not have been, materially affected by the shortage of river steamers. It was not such shortage which prevented sufficient doctors, assistant surgeons and sub-assistant surgeons being sent to the expedition up to the end of 1915, and yet the insufficiency of medical personnel was one of the worst features in the hardships, not only on the battle-field, but also on the journey down the river, notably after the retreat from Ctesiphon. It was not the shortage of river transport which prevented the expedition from being supplied in 1915 with sufficient hospitals; nor, as the Viceroy himself pointed out, could the insufficiency of river transport justify the omission to send to the front a proper supply of such unbulky necessaries as bandages, dressings and drugs.

112. In our opinion, the known shortage of ordinary river transport, if anything, aggravates rather than palliates the omissions of the medical authorities. If the ordinary boat-service had been adequate for the sick, there might have been some excuse for omitting to provide special river hospital steamers, but the ordinary boat service was known to be inadequate.

F. SUPPLEMENTARY.

113 Similarly the device of eking out insufficient hospital accommodation by using the field ambulances as hospitals might have been less reprehensible, if it had been possible promptly to send all field-ambulance patients down river when necessary. But the inadequacy of transport upset all certainty of the proper evacuation of the field ambulances, with the result that they became congested with patients. In fact, the known lack of river transport accentuates, but does not excuse, the unwisdom of resorting to this practice.

114. Even in the case of the ambulances of the reinforcing divisions from France left behind at Basra, the difficulties of insufficient transport might have been largely overcome if the authorities in Mesopotamia had at an early date explained the situation to the authorities despatching the reinforcements, and had asked for the field ambulances to be sent on in advance so as to provide sufficient time for their conveyance to the front. But this was not done; and the omission is significant of the prevailing lack of foresight and organisation. Even in such an obvious matter as detailing an embarkation officer to see to the proper despatch of medical equipment, stores, etc., nothing was done till quite late in the campaign, and there are numerous instances of such equipment having failed to reach its destination, owing to the packages being insufficiently labelled or improperly packed in the steamers.

115. That the lack of ordinary river transport was not the principal cause of the sufferings of the wounded is also proved, as Sir Beauchamp Duff points out, by the great improvement which is noted by the Vincent-Bingley Commission and other witnesses in March, 1916. At that time the amount of river transport was proportionately no greater than it had been during the breakdown after Ctesiphon and Sheikh Saad; but the organisation had been improved and the personnel had been increased, with the consequences that the sufferings of the wounded were very materially decreased. We are convinced that very much of the avoidable sufferings of the sick and wounded in Mesopotamia was due, not so much to lack of ordinary river transport as to the lack of organisation and foresight. The difficulties of river transport were present from the first and should have stimulated the prevision and resourcefulness of the medical authorities; but instead, as we have seen, they remained supine, until galvanised into unavailing action by the disasters which at once disclosed their incompetence and aroused their fears.

Frequent Changes in Occupancy of Office of D.M.S. India.

116. Between the summers of 1914 and 1916 no less than four individuals have held the post or administered the duties of D.M.S. in India—*viz.*, Sir W. Babtie, Surgeon-General MacNeece, Sir Pardey Lukis and Surgeon-General O'Donnell. Few systems of administration, even if good in themselves, could in time of war sustain the strain of such rapid dislocation of supreme authority.

Responsibility for Provision of Medical Necessities.

117. It has been made clear to us that, according to the existing system and regulations, the higher military medical authorities themselves only directly provide doctors, nurses, instruments, drugs and dressings. All other things required for the medical treatment of the sick and wounded, or for their transport (many of these special to the medical service) have to be provided by and obtained from other departments often busy with the needs of combatant branches.

118. It is well known that the scientific treatment of sick and wounded has advanced by leaps and bounds of recent years, and we need not argue that any appliances or arrangements tending to assist or accelerate the healthy restoration of those in hospital to the Army or to civil life, are of national importance. The question, therefore, suggests itself whether the higher medical authorities should not in future be given greater responsibility as regards the purchase and provision of these matters. It is true that the Mesopotamia Campaign has not redounded greatly to their credit, but at the same time, it is clear that their difficulties were increased by the failures of other departments. We refrain from making a definite recommendation on this matter, recognising that very considerable experience elsewhere than in Mesopotamia is now available for guidance, but we think the time is ripe for the re-examination of the practice that has obtained hitherto, and that the distribution of responsibility amongst four departments, each of whom has to provide something, without which the contributions of the other three may be rendered futile, is an unwise application of collective effort.

F. Supplementary.

Major R. M. Carter, I.M.S

119. Before we leave this part of our report we wish to express our appreciation of the evidence given and the work done by Major R. M. Carter, I.M.S. He by his persistence brought to the notice of his superiors the terrible condition of the wounded when they arrived at Basra after Ctesiphon, and in other ways he revealed shortcomings which might have been ignored and left unremedied. His sense of duty seems to be most commendable, and he was fertile and resourceful in suggesting remedies.

G. Medical Findings and Recommendations.

Findings.

Findings.

We find that :—

120. The medical provision for the Mesopotamia Campaign was from the beginning insufficient; by reason of the continuance of this insufficiency there was a lamentable breakdown in the care of the sick and wounded after the battle of Ctesiphon and after the battles in January, 1916; there was amelioration in March and April, 1916; but that since then the improvement has been continual, until it is reasonable to hope that now the medical provision is satisfactory.

121. The defects of medical provision caused avoidable suffering to the sick and wounded, and during the breakdown in the winter of 1915-16 this suffering was most lamentably severe.

122. The deficiencies, which were the main causes of the avoidable suffering of the sick and wounded, were in the provision of the following :—

(*a*) River hospital steamers.
(*b*) Medical personnel.
(*c*) River transport.
(*d*) Ambulance land transport.

To these fifth and sixth main causes may be added in respect to the operations in January, 1916 :—

(*e*) The absence of the medical and supply establishments of the 7th Division.
(*f*) The premature efforts to relieve Kut in consequence of the erroneous estimate of supplies in that place.

123. As to personal responsibility, the Vincent-Bingley Commission found—

That a grave responsibility for that part of the suffering which resulted from avoidable circumstances rests with the Senior Medical Officer of the Force, Surgeon-General G. H. Hathaway, and with General Sir John Nixon, the General Officer Commanding the Force, from April 9th, 1915, to January 19th, 1916. General Hathaway did not represent with sufficient promptitude and force the needs of the services for which he was responsible, and in particular failed to urge the necessity for adequate and suitable transport for the sick and wounded with that insistency which the situation demanded. General Nixon did not, in our opinion, appreciate the conditions which would necessarily arise if provision for the sick and wounded of his force were not made on a more liberal scale.

We endorse the finding as regards Surgeon-General Hathaway, who in our judgment showed himself unfit for the high administrative office which he held. We may add, however, as regards River and Land Transport, that, while it was the duty of Surgeon-General Hathaway to urge its necessity, it was actually the duty of the Quartermaster-General's Department and Sir John Nixon's staff to see that it was provided.

So far as Sir John Nixon is concerned, however, we think that he was throughout solicitous as to the condition of the wounded. The main mistake he made was to rely too absolutely on the statements made to him by his Deputy Director of Medical Service, Surgeon-General Hathaway; to that extent he may be blamed, but he stands, so far as responsibility is concerned, in a very different position from that occupied by Surgeon-General Hathaway.

124. The officer directly responsible for the deficiencies of medical provision in Mesopotamia is, however, the Director of Medical Services, India. This appointment was held at the beginning of the war by Surgeon-General Sir William Babtie, who held the office between March, 1914, and June, 1915, but was away from India for six weeks in February and March, 1915. He was succeeded by Surgeon-General J. G. MacNeece on July 8th, 1915, and the latter proceeded home on sick leave on April 15th, 1916. Sir William Babtie in his evidence before us impressed us as an officer of ability and knowledge, but we do not think that he brought these qualities sufficiently to bear

G. Medical Findings and Recommendations.

upon the task before him. He accepted obviously insufficient medical provision without protest and without any adequate effort to improve it. He cannot therefore be held blameless.

125. Surgeon-General MacNeece did not give evidence before the Vincent-Bingley Commission, but he appeared before us. He was, in our opinion, an officer thoroughly desirous of fulfilling the duties assigned to him; but he was a man of advancing years and diminishing strength, unequal to the position he was called upon to fill, and his administration appears to us to show no signs of the vigour and efficiency that were required.

126. We find that:—

(*a*) The Home Government agreed with the Indian Government in limiting their general military preparations of India before the war in the interests of retrenchment, and provision was accordingly not made for such an Expedition as that to Mesopotamia. The limitation of medical preparation and the low standard of medical treatment in the Indian Army at the outbreak of war were the natural outcome of this policy, which was pursued for many years, and was in force right up to the date of the war.

(*b*) The private letters of the Secretary of State to the Viceroy showed an earnest and continuous anxiety as to the condition of the wounded, and the only comment that can be made upon the Secretary of State's procedure is that he did not fully utilise the official powers at his disposal for the purpose of forcing at an earlier period an investigation into the treatment of the wounded in Mesopotamia.

(*c*) To Lord Hardinge of Penshurst, as Viceroy, belongs the general responsibility attaching to his position as the head of the Indian Government, to which had been entrusted the management of the Expedition, including the provision of medical services. In regard to the actual medical administration he appears to us to have shown throughout the utmost good will, but considering the paramount authority of his office, his action was not sufficiently strenuous and peremptory.

(*d*) A more severe censure must be passed upon the Commander-in-Chief, for not only did he, as Commander-in-Chief of the Army in India, fail closely to superintend the adequacy of medical provision in Mesopotamia, but he declined for a considerable time, until ultimately forced by the superior authority of the Viceroy, to give credence to rumours which proved to be true, and failed to take the measures which a subsequent experience shows would have saved the wounded from avoidable suffering.

127. There has been misuse of official reticence as to medical defects and the sufferings of the sick and wounded.

128. While the protective and sanitary work of the Medical Administration has in certain directions and at some periods (notably under Colonel Hehir) been commendable, yet there has not been generally sufficient promptitude in taking the precautions dictated by modern science for the protection of the troops against disease.

129. Throughout the campaign (with insignificant exceptions) the executive and regimental medical officers and personnel have devoted themselves with unremitting kindness, zeal and industry to the care of the sick and wounded with such means as were at their disposal.

Recommendations.

130. The evidence put before us indicates the necessity for certain immediate changes in the existing system of medical organisation in India, which we propose to enumerate. We are of the opinion that:—

(*a*) The Director of Medical Services in India, in war-time especially, should have far greater powers, than he at present possesses to authorise expenditure and make purchases, and to delegate such power to his subordinates. The present elaborate system of financial check and counter-check, and correspondence with other military departments, before what is wanted can be obtained has proved from its dilatoriness a real danger in war-time.

(*b*) Whenever an expedition is sent over-seas from India, responsible officers should at once be located at the Port of Embarkation, with wide power to act. We have referred elsewhere to the fact that the Commander-in-Chief never visited Bombay during the crisis of the campaign. Some of his staff did do so, but their visits

were spasmodic, and in no case had these officers power to give orders or settle important questions without further reference to Simla or Delhi. Further, all power being concentrated at Headquarters, the ruling authorities deprived themselves of the value of being in constant touch with those going to, or returning from, Mesopotamia. If it was true as alleged that the Headquarter Staff at Simla were tied to their secretariat work there, the Bombay Government was on the spot and common-sense would have suggested the delegation of authority to a Government so conveniently situated.

(*c*) At the Port of Embarkation the embarkation staffs should be responsible for seeing that the equipment and personnel of each medical unit should not be separated in different vessels, but embarked together in the same vessel. This rule was frequently neglected at Bombay.

(*d*) There should be an immediate and general improvement in the whole standard of comfort and accommodation in the hospitals for British troops in India. Surgeon-General MacNeece stated "even now there are practically not more than 2 or 3 up-to-date military hospitals in India." We are glad to note that the new war hospitals in Bombay are reported by the Vincent-Bingley Commission as bearing favourable comparison with any similar hospitals in the United Kingdom. This shows what can be done in India when there is impulse to reform. We think it discreditable to the Indian Government that the general standard of hospitals in India should fall below the standard of efficiency now demanded in Military Hospitals at home. To assist in reforming this state of things, we think that the R.A.M.C. or a corps on similar lines should be available for service in all British Hospitals in India, and that a better and more complete female nursing service should also be organised.

(*e*) As regards the medical treatment of Indian troops, no time should be lost in substituting a Station Hospital system for the present regimental treatment, "I doubt," one I.M.S. witness says to us, "whether you gentlemen would consider that the Sepoys' hospitals in peace time in India are hospitals at all." Sir Havelock Charles described them as "a disgrace to the Government of India." Surgeon-General MacNeece states "there are no well-equipped operating theatres, X-ray rooms, laboratories, etc." and Sir William Babtie, "they are so bad that I think it would be necessary to reform them *ab initio*." The new Indian hospitals should be staffed by enlisted personnel of all ranks, and should be used for building up trained reserves of menial establishments in peace time.

(*f*) All deficiencies usually allowed to prevail in peace-time in the mobilisation equipment of general hospitals should be made good. Sir W. Babtie told us that of the general hospitals in India, "Twelve were supposed to be mobilisable, but only four were complete in all the different Departments of supply." All such equipment should be stored and in readiness, and inspected, as is done now in the case of field ambulances, casualty clearing hospitals and stationary hospitals.

(*g*) Base Depôts of Medical Stores should be reintroduced into the Indian Field Service organisation and kept ready for mobilisation.

(*h*) At the outset of every campaign there should be provided a separate superior sanitary organisation and staff charged with the arrangements for preserving and safeguarding the health of the fighting troops, and responsible to the Principal Medical Officer of the force, but otherwise entirely separate from the organisation for the care of the sick and wounded This implies a formation in peace time of an adequate reserve of sanitary officers enlisting in it, if necessary, the services of specialists in civil employment.

(*i*) The Field Service Ration should receive very careful reconsideration and alteration in the light of experience in Mesopotamia. This especially applies to the rations for Indian troops. The War Office Sanitary Committee found that even "the improved ration" sanctioned as late as October last was deficient in many respects.

The above are only some of the defects revealed by our investigations, but they are sufficient to prove the necessity for an urgent, and thorough reform by the Indian Government of the whole system upon which their medical services are based, and under which they are controlled. Sir Alfred Keogh, whose administration at the War Office as Director-General, Army Medical Services, has been very successful during this war, at the conclusion of his evidence made the following very strong statement:—

I have no hesitation whatever in saying that the medical arrangements connected with the Army in India have been for years and years most disgraceful. I say that with a full sense of responsibility. I have served many years in India. I have not been there for some time now, but in my opinion things are not better than they were. Anything more disgraceful than the carelessness and want of attention with regard to the sick soldier in India it is impossible to imagine.

PART XI.—CAUSES CONTRIBUTING TO THE ERRORS OF JUDGMENT AND SHORTCOMINGS OF RESPONSIBLE AUTHORITIES.

A. Division of Responsibility for Campaign.

Campaign in Mesopotamia—"No Man's Child."

1. In the story of the military successes and reverses of this campaign, there constantly crops up almost from the day of the landing of the force, evidence of shortage of transport of all kinds, of the antiquated equipment of the troops, of grave deficiencies in medical personnel and material, occasional shortage of rations at the front, and a great, if not total, lack of comforts. To use a current expression, the force from the first was "ill-found" to meet the privations and hardships inseparable from campaigning in Mesopotamia, and as its numbers increased bad went to worse. General Gorringe graphically gave expression to the feeling which he considered pervaded the force, when he said: "It was believed to be a side-show and 'no man's child.'" Though these colloquialisms undoubtedly err on the side of exaggeration, it is impossible to deny that there was some foundation for them. Indeed, in a sense such haphazard expressions go right to the root of the causes of the failures and reverses, as will become apparent when we investigate why this expedition did not receive from either of the great military supervising staffs in London or Simla that care and attention, which were necessary to surmount the exceptional difficulties of climate and country which it had to encounter.

2. When the war broke out in 1914, there were in the British Empire two great military administrative organisations—one in England, the other in India, at Simla. In our self-governing Dominions such as Canada, Australasia, New Zealand and South Africa there were self-supporting local forces under the control of their respective Governments. But the War Office in London and the military departments at Simla were the only complete military organisations equipped for the planning, despatch, control and supply of expeditions beyond their respective territories over the sea. As a preparation for such operations, the Intelligence Department of each of these organisations had assigned to it certain territories within and concerning which it had to collect and collate topographical and other information during times of peace, the assumption clearly being that the areas so defined for purposes of information would, in the event of their becoming theatres for warlike operations, be under the control of the organisation which had previously collected the information.

3. Under this arrangement, Asia was divided between the Imperial and Indian War Intelligence Departments. It is inadvisable to give the details of this delimitation; it will be sufficient for our immediate purpose to state that a line was drawn through Arabia from Akaba to Basra, all north of that line belonging to Whitehall, all south to Simla. Basra was thus given to India, Mesopotamia to Great Britain—a somewhat confused division of responsibility, inasmuch as Basra must inevitably become the base of any operations in Mesopotamia from the Persian Gulf. The collection of information relative to Persia fell within the duty of the Indian Intelligence Department, and the whole of the Persian Gulf is patrolled by war vessels, which are under the control and policy of the Indian Government. Mesopotamia, being at the head of the Persian Gulf, was not looked upon by the War Office as an area requiring their special attention, as it was within the radius of action of India, though outside their sphere of intelligence. The Simla Intelligence Department had not before 1914 prepared schemes for military operations north of Basra. The likelihood of a war with Turkey in alliance with Germany did not, previous to that date, seem to India to be a reasonable probability. It was also asserted by Sir Beauchamp Duff that, in order to prevent overlapping, there was an understanding that the Whitehall Intelligence Department would take Mesopotamia in hand, and that they deprecated the Indian Authorities preparing plans for a campaign in that country. The information which Whitehall had collected about the country was, however, sent to India and Mesopotamia.

4. In addition to these two Military Organisations there is a Military Department at the India Office under the authority of the Secretary of State for India, and with whose advice he controls and decides the general military policy of India, but this department is not organised for the purpose of directly managing a campaign. It was, however, through the instrumentality of this Department that the Mesopotamian campaign was started.

5. At the beginning of the war, from an Intelligence and General Staff point of view, Mesopotamia was "no man's child," or rather, was the foster-child of both Simla and Whitehall, the acknowledged child of neither. The War Office had its own gigantic task

A. Division of Responsibility for Campaign.

of expanding a small army into one of national dimensions, and at the same time of organising a series of expeditions abroad, towards which the Indian Military Authorities were compelled to contribute largely both in the shape of personnel and material. Simla had, in addition to the task of providing these Oversea Expeditions, to guard against the ever-present danger of attacks on the North-West frontier and a recrudescence of disaffection instigated by German agents and money in parts of India. It was only in September, 1914, after the contributions of India to the expeditions to France, Egypt and East Africa had been settled, and their military establishments thus depleted, that the Secretary of State for India directed from Whitehall the Indian Government to send a brigade to the head of the Persian Gulf.

6. The subsequent correspondence clearly shows that the Indian Government was at first lukewarm on a proposition which it did not originate. The scope of the expedition grew, and its numbers increased, continuing to make a constant drain upon Indian resources. So reluctant were the Government of India to comply with these increased demands that in March, 1915, it was only under compulsion of a most imperative order from Whitehall that the reinforcements necessary to bring up the force to a strength of two Divisions were sent. This reinforcement secured victory and firmly established the expeditionary force. Sir John Nixon assumed command in April, 1915, and took out with him the Orders previously referred to, which included instructions to prepare (1) A plan for the effective occupation of Basra Vilayet, and (2) A plan for the subsequent advance on Baghdad.

7. The objects of the expedition up to this time had been defined to be (1) that it would checkmate Turkish intrigues, (2) that it would encourage the Arabs to rally round us and confirm the Sheiks of Muhammerah and Koweit in their allegiance, and (3) that it would protect the oil installation at Abadan. But these objects were not so precisely limited that they could not be expanded, so as to cover operations much more extensive than were originally contemplated by the Home Government. Almost from the very outset of the expedition, the political importance of occupying Baghdad was urged by Sir Percy Cox, the Indian Government's agent in the Persian Gulf. The political officers on the spot, in Simla and in Whitehall, both at the Foreign Office and the India Office, all at various times gave expression to a similar view, and it may be that the successive advances from Basra to Kurna, Kurna to Amarah, and Amarah to Kut, though put forward as necessary defensive operations, were partially prompted by this ambition. During the later of these advances, the attitude of the India Office was one of reluctant acceptance of the forward movements advocated by Simla. Simla and Whitehall were not pulling well together. Up to this date no full and frank exchange of opinion seems to have taken place either as to the scope and aim of the expedition, or as to the preparation and expenditure necessary to ensure its success.

8. During the first months of this campaign the India Office was stimulating the Indian Government to greater exertion by ordering them to send out additional troops. So soon as the troops sent out amounted to two Divisions, then the rôle was reversed, and it was the Indian Government who were constantly pressing upon the Home Authorities the necessity of advance. Sir John Nixon in his evidence before us criticised—and we think with justice—the discrepancy between his Orders of March 24th, 1915,* and the telegraphic criticism of his operations sent him a month later by the Secretary of State.

9. The Mesopotamian Expedition was one which during the early operations required the closest attention. It was only by a careful study of the abnormal nature of the conditions, under which any lengthened campaign would have to be carried on, that the inherent difficulty of establishing a reliable base at Basra could be overcome. Even if the base had been consolidated and made effective, there still remained the difficulty of providing steamer transport of a special character and if sufficient steamer transport could not be obtained in a given time, then railroads became a necessity. But the improvement of the harbour and the building of railroads meant permanent, and possibly unremunerative, outlay, and no matter what the outlay might be, it could not give an immediate response in the shape of improved communication. Makeshifts and hand-to-mouth contrivances therefore became the order of the day, as they gave at a less immediate expenditure a quicker though ephemeral return.

* See Part IV., para. 2

B. Faulty Organisation of Indian Military Administration.

10. During recent years certain important changes had been made in the highest branch of Indian military administration, and certain influences were at work, which, in our judgment, were detrimental to the efficient supervision of this or any Oversea Expedition. Up to 1905 there had been two high officials in charge of the administrative and executive work of the Indian Army—namely, the Military Member of Council and the Commander-in-Chief. By "Indian Army" we mean Indian Military Establishments, as there is always a large proportion of the British Army stationed in India, and these troops, so long as they are there, are upon the Indian establishment. The Military Member of Council was in charge of what we may designate the administration of the Army, and it was through him that the demands of the Commander-in-Chief for the Army came to the Viceroy's Council, though the Commander-in-Chief himself was an extraordinary Member of that Council. Whatever may have been the drawbacks of this system, it had the advantage that by this division of work, the Commander-in-Chief was free to perform his important executive duties of inspection, and of reviewing and testing the efficiency and wants of the troops under him, while the Military Member remained at the seat of Government.

11. The Military Member was abolished, and in his place a Supply Member was appointed as one of the Viceroy's Council. This post was, however, extinguished a short time after its creation. Thus, the whole of the administrative and executive work of the Army became concentrated in the hands of one man, who has a duality of responsibility, for he is both Military Member of Council and Commander-in-Chief. Being the only military representative on the Viceroy's Council it is his duty to be present at the meetings of the Executive Council. The two Army Departments, namely, that of which the Commander-in-Chief in his capacity as such is the head, and that of which the Commander-in-Chief in his capacity as Military Member of Council is also the head, are both permanently located in Simla.

12. While there is centralisation at the head of the administration, a cumbrous dualism remains below. These two Departments, though under the same individual, are kept separate and distinct, and they are separately maintained in order to give substance to the fiction that one person is two persons. The Commander-in-Chief, in his capacity as Commander-in-Chief, may think and order something in his department which in his subsequent capacity as Military Member in another Department he may like to unthink and counter order. The procedure under this unique form of military administration was described to us by Mr. Brunyate, the Financial Secretary to the Government of India. He had been for some years Financial Adviser to the Commander-in-Chief and Military Member of Council, and is a high expert upon the procedure which this dual system entails. His evidence was so clear and explicit that we reproduce it verbatim. When asked to give a concrete case of how a paper relating to a proposal for Army equipment would pass through the two Departments, he replied :—

> The Quartermaster-General, it may be supposed, wishes to have more mules. Probably before putting forward the proposal at all he sees the Commander-in-Chief personally as Commander-in-Chief, and ascertains from him that he is willing to have that proposal ventilated. He then writes a note stating his facts, probably supported by a note by the Director of the Army Remount Department, makes a definite recommendation, estimates the cost and marks his note to the Army Department of the Government of India. The office clerks of the Army Department note on the case, the Assistant Secretary notes, the Deputy Secretary may note, and it reaches the Army Secretary—we will call him General Holloway, though he is not actually Army Secretary now. He criticises the proposal if he thinks fit. . . . The Office of the Financial Adviser then note upon it. . . . The clerks in the Finance Adviser's office note, the Assistant or Deputy Financial Adviser notes, and the case then comes to the Financial Adviser, now Mr. Fell. Mr. Fell may be prepared at once to accept the proposal on behalf of the Finance Department, and may intimate that he does not intend to refer it to the Finance Member. The file then goes back to the Army Secretary, and in that case he at once arranges for the necessary orders to be issued to give effect to the Quartermaster-General's proposal, unless he thinks the case of sufficient importance to refer it to the Army Member.
>
> Such reference will, of course, practically always be required if the proposal is one requiring the sanction of the Secretary of State. In that case the Army Secretary would take the Army Member's orders at this stage, and a despatch to the Secretary of State would then be drafted in the Army Department. . . . Or again, Mr. Fell, when the case first reached him, might have criticised the proposal, and indicated a desire to see it modified or rejected. In that case the file would still go back to the Army Secretary, and he would doubtless at that stage take the orders of the Army Member unless before doing so he wished to have the opinion of the Quartermaster-General on the criticisms and suggestions which had been made in the Military Finance Branch. Mr. Fell, when criticising the proposal would probably have indicated whether he intended to refer the case eventually to the Finance Member. Thus when the Army Secretary brought these criticisms before the Army Member, the latter would know that if he decided to over-ride the Financial Adviser's criticisms,

he might have to face opposition from the Finance Member. The Army Member would then pass his orders. If he adhered to the scheme as put forward by the Quartermaster-General and the Army Department he would record a note to that effect. The file would then go back to the Financial Adviser, and the latter would not note again, but would submit the case to the Finance Member. If the Finance Member decided not to press the objections raised by Mr. Fell, the proposal would become a fully accepted proposal, and orders would be issued for putting it into effect. If, however, the Finance Member definitely objected to the scheme, the case would then go back to Mr. Fell for return to the Army Secretary for re-submission to the Army Member. The Army Member might then defer to the Finance Member's objection, in which case the whole proposal would be dropped with the Army Member's concurrence, though a reluctant concurrence. If, however, the Army Member, in spite of the Finance Member's objections, considered that the proposal was a necessary one, he would intimate to the Army Secretary that the case should be referred to His Excellency the Viceroy, under our Rules of Business, which prescribe that when two members of Council differ, the case must be referred for the orders of the Viceroy. The Army Secretary would then lay the case before the Viceroy. The latter might very possibly indicate a personal opinion that in the circumstances, as a particular case he thought it perhaps desirable that the views of the Army Member should be deferred to, and any expression of the Viceroy's wish in an ordinary case is very frequently—I might almost say generally—deferred to. Or the Viceroy might, pursuing the ordinary procedure under our Statutory Rules of Business, simply instruct the Army Secretary that the case was to be brought up in Council the following week. It would then be discussed in Council, the Army Secretary being present, but not taking any part in the discussion, and would be settled by the views of the majority of the Council.

Asked how long a disputed case might take, he replied :—

At the best a disputed proposal would, I think, ordinarily take a good many weeks. I cannot put it more exactly than that, but a great deal depends upon whether the responsible secretary takes a grip of the case and prevents its being constantly remitted backwards and forwards between the Financial Adviser on the one side and the Administrative Authority, the Quartermaster-General, or whoever he may be, on the other, inviting each in turn to reply to the other's rejoinders and criticisms. Where a case was not taken hold of and put to an end, I have known it very lamentably protracted from this cause, but it is always within the power of the Army Secretary, at any time when a case reaches him on its perambulations, to say that it has been sufficiently discussed, and to take it up at once for the Orders of the Army Member; and that should be done after reasonable opportunity for meeting new criticisms has been given.

It was admitted by him that during the perambulations of this proposal, the Commander-in-Chief played little or no part. When further asked if this procedure would apply to any proposal for an increase of equipment—say, machine guns—he replied :—

It would apply equally well, but the procedure would be somewhat more cumbersome, because instead of our only having the Quartermaster-General's branch to deal with, it would probably involve also the General Staff, the Adjutant-General, and the Ordnance Department.

When further asked if this elaborate process of check and counter-check was not really carried on to keep up the fiction that there are two people as there used to be—the Military Member of Council and the Commander-in-Chief—whereas at present there is only one person in these capacities, he replied :—

I think that is largely the case, particularly if it is put in this way, that in order to maintain an adequate status and influence for the heads of the Army, the Adjutant-General, the Quartermaster-General, and so on, it is, or has been considered necessary to retain the fiction of the Commander-in-Chief's existence in this arrangement, it is through him that they derive their own status.

This astounding system has only to be described to be condemned. The Secretary of State for India, Mr. Austen Chamberlain, in his evidence adumbrated certain Army reforms that he had in his mind. We trust that amongst these reforms the fiction of one person being two, and the anomaly of two establishments being maintained at public expense to give effect to this fiction, will permanently disappear from the military system of India.

It is only fair to add that since the war began this lengthy procedure has, to a large extent, been put on one side. Still, during this period the Commander-in-Chief has had to perform the dual duties of the two offices which he nominally holds.

Isolation between an administrative department and its operating factors tends to give to the secretariat so isolated an undue sense of the importance of minute and memorandum writing. In the case of the Simla Departments, this is an evil which was constantly brought to our notice, and many of our witnesses bear testimony to the inordinate dimensions attained by minute-writing, check and counter-check, and the reference backward and forward of papers and proposals in the administrative departments of the Army. The present system of check urgently requires simplification and acceleration. It is difficult under it to ascertain where responsibility begins and ends, whilst the waste of time and energy involved must operate detrimentally to efficient administration. Those engaged in secretarial work seem to have forgotten that minute-writing is not the end all and be all

of Army administration; it is only an instrument for the co-ordination of efficiency and economy, and for the prevention of waste and extravagance. If, by undue expansion, it fails to achieve these ends, it tends to promote the very administrative evils it was intended to counteract.

13. The removal of the seat of Government from Calcutta to Delhi greatly diminished, if it did not destroy, the contact between high officialdom and the commercial and business elements of India. At Delhi almost the entire European population is official and connected with Government departments. A few years back each Presidency had a separate Commander-in-Chief and a separate army, and their Headquarter Staffs were permanently located in the capitals of the respective Presidencies. These armies have all now been amalgamated, and their separate commands and staffs abolished.

14. It will thus be seen how great has become the centralisation of authority in one man's hands. Sir Edmund Barrow, the Senior General on the Indian List and Military Secretary at the India Office, and an officer of quite exceptional experience, expressed the view that the Commander-in-Chief is now trying to perform the work of six men, and he further added that the old duties of the Commander-in-Chief have completely fallen into abeyance. The late Commander-in-Chief, Sir Beauchamp Duff, did not agree in this opinion. He contended that in times of peace one man could discharge the functions of both offices, especially if he were allowed a Deputy Chief of the Staff. But he admitted that there was more than one man could do in time of war, that during the war he had been able to give no time to the special work of Commander-in-Chief, and that the location of the Military department at Simla cut off the Commander-in-Chief in war time from contact with the combatant services.

15. Simla, as is well known, is a hill-top in the Himalayas on the borders of Nepal. Its remoteness from great towns and great cantonments of India and its inaccessibility. render it singularly unsuitable for the residence, during the greater part of the year, of the one high official who has to discharge this unique mass of military responsibilities. When, however, in addition to his normal dual work, he is also in charge of an oversea expedition, his disconnection from the actualities of fighting and his want of contact with those who return to and from the stricken field, become a serious impediment to the knowledgeable discharge of this war work.

Sir Percy Lake was for some time Chief of the General Staff at Simla, and was in constant personal communication with the Commander-in-Chief. He was sent to Mesopotamia in January, 1916, to take Sir John Nixon's place, whose health had broken down. If there was anyone in India who from his daily work and communications might have been expected to have appreciated the difficulties confronting an army in Mesopotamia, it should have been Sir Percy Lake. In his evidence before us he frankly admitted that in no sense did he fully realise the nature of the obstacles to be overcome, or the magnitude of the exertions necessary to enable them to be surmounted, until he took over the command in that country.

16. The great mass of the troops, stores, and reinforcements for Mesopotamia embarked at Bombay, and at the same port the disembarkation of the huge number of sick and wounded returning from that country took place. Sir Beauchamp Duff as Commander-in-Chief never visited that port during the crisis of the war, nor has any permanent member of the Headquarter Staff been there stationed. Everything to be done was attempted from Simla. Requisitions and indents for stores, applications for leave, and other matters, all of which could have been easily settled in Bombay, had to go to Simla before they were complied with. The views and opinions of those returning sick or wounded as to the conduct and wants of the expedition do not seem to have filtered through to Simla until quite late in the campaign. Civilians and non-officials in Bombay knew more of what was going on in Mesopotamia than the Headquarter Staff in Simla. Ignorance at Headquarters produced scepticism, and this scepticism was supported by the very optimistic reports officially received from Basra. One witness who went from Basra straight to Delhi or Simla has informed us of the incredulity with which his statements were received, and how official despatches were brought out of portfolios which contradicted what he himself had seen and knew.

17. Lord Hardinge, in one of his letters to the Secretary of State to which we have already alluded, writes on the 18th February, 1916: "I may mention here that I have

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at last succeeded in convincing the military authorities that the medical arrangements up the Tigris are as bad as can be." A severer comment could not have been made upon the isolation and ignorance of those primarily responsible for the treatment of the wounded. Bombay, Calcutta, London, the Houses of Parliament, and private individuals, both in India and England, were all cognisant of what was going on. Simla and Delhi alone were unmoved. Simla has so long been the established summer quarters of the Government of India that it has almost become a tradition; but its inconvenience as the Army Headquarters in time of war and in the management of oversea expeditions can be well illustrated by imagining Thurso or Wick to be the headquarters of the British Army Departments during this war. The idea in its nakedness is grotesque, yet something like it was attempted in India for the first sixteen months of the Mesopotamia Expedition.

C. Relations between the Secretary of State and the Governor-General and their respective Councils.— Private Telegrams.

18. Almost concurrently with the adoption of the principle of centralisation in military administration, a gradual process of change in the methods of communication between the Secretary of State for India and the Governor-General of India has taken place which had an important bearing upon the management and conduct of the Mesopotamia Expedition.

19. The Government and Administration of India are vested in the Secretary of State for India in Council and in the Governor-General of India in Council, and the former body dominates the latter. The powers of the Secretary of State for India in Council are immense, greatly exceeding those exercised by an ordinary Secretary of State. So far as finance and expenditure are concerned, the Council stands to the Secretary of State for India much in the same relation as that in which Parliament stands to the other Secretaries of State. It may reasonably be assumed that Parliament would not have given these immense powers to any individual official if, in the exercise of such powers, he was dissociated from his Council.

20. The Governor-General in Council is subordinate to the Secretary of State for India in Council and rules are laid down in the Act of Parliament as to the procedure through which the Secretary of State's orders and communications to the Governor-General should be made. Those means of communication, according to the Statute, come under three heads:—

(*a*) "Public," or, as we prefer to designate them, official communications which pass through the Council.

(*b*) "Urgent" communications, which need not necessarily go to the Council and which the Secretary of State has the power of sending on his own authority, though he is subsequently under the obligation of explaining the causes for his so acting.

(*c*) "Secret" communications, on which the Secretary of State has the power o acting on his own authority, nor need he explain to his Council the reasons why he dispenses with their advice. But these "secret" communications are limited to certain subjects.

21. In India the power of the Governor-General to dispense with his Council is much more circumscribed. The Government of India is throughout the Statute invariably designated as the Governor-General in Council. If the Governor-General is away from his Council on tour he has all the powers which he could exercise if he was with his Council, and moreover he has the power, when with the Council, of over-ruling them on certain questions, if the majority of them differ from him. But the Members of the Secretary of State's Council and of the Governor-General's Council have a statutory right of protesting in writing against any action of which they disapprove. The protest must be in accordance with their expressed objections in Council, and such written protest can be called for and laid before Parliament.

22. The intention of Parliament in setting up the Government of India upon this basis seems to have been a wish to associate the Secretary of State and the Governor-General (who under the conditions existing in this country would probably be politicians), with Councils of trained Indian administrators; and the power of protest was doubtless given so that each Council might be a check upon the Secretary of State, or the Governor-General, against taking impulsive, or, in the view of the Council, improper action.

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23. In addition to these authorised statutory communications it has always been the practice of the Secretary of State and the Governor-General to communicate privately, one with another, both by telegram and by letter. These telegrams have, up till quite recently, been supplementary to and explanatory of the official telegrams sent, which as a matter of course come before the Governor-General and Secretary of State in Council. They have also dealt with personal matters, which it is not advisable should be contained in official telegrams, and within certain limits they seem to us to be useful, if not necessary links of intercommunication.

24. All the Statutes relating to the Government of India were consolidated in Acts which received Royal Assent in 1915 and 1916; but in these consolidating Statutes no mention whatever is made of private communications, nor is authority given either to the Secretary of State, or the Governor-General to substitute private telegrams for the prescribed methods of communication laid down by the Statute. All private telegrams are the property of the sender, and they are not necessarily recorded on the files of the Department to which their contents may relate; though they are occasionally so recorded when the Secretary of State or Governor-General gives express orders to that effect. It is usually the practice of the Secretary of State and the Governor-General to take away their private telegrams at the close of their tenure of office, and Lord Crewe informed us that Lord Morley so acted on vacating the post of Secretary of State for India. There is therefore no public record of the purport of the vast majority of these private communications. The substitution of private for public telegrams in recent years has apparently so developed as to become almost the regular channel of official inter-communication.

25. A very important document was laid before us containing a number of telegrams of the gravest consequence relating to the Oversea Expeditions and Forces which the Indian Government were ordered at the instance of the Imperial Government to provide. Every telegram in the whole series, except one, on both sides was marked private, though it was stated by the Viceroy that the substance of the last telegram would be confirmed in an official telegram.

A large number—if not the larger proportion—of the telegrams quoted in our report referring to the advance on Baghdad are marked "Private." One of the most important of these private telegrams, conveying new and serious information as to the possible concentration of 60,000 Turkish troops near Baghdad, was, in consequence of its being marked "Private," not filed in the Military Department, and was not transmitted to Sir John Nixon in Mesopotamia.

26. The substitution of private for official telegrams tends to dispossess the Council of the functions, which by Statute they are entitled to exercise. Both the late Secretary of State for India and the late Governor-General justified recourse to these methods of communication on the ground that in time of war urgency and secrecy are of paramount importance. We at once accept that proposition; but it is clear in our mind that secrecy can be established by a properly regulated procedure; and as regards urgency, as both Councils are small in numbers, there seems to us no difficulty whatever, at any rate in times of emergency, in insisting on their meeting every day.

27. We have been informed by two Members of the Governor-General's Council that according to their recollection the Council was never consulted as to, nor were they privy to the campaign in Mesopotamia. Their opinion was not asked as regards the advance to Baghdad, though occasionally, from time to time, some information was given to them in the shape of conversation at the Council. This statement, though traversed in details by Lord Hardinge, is in the main, we believe, correct.

The despatch of any oversea expedition from India is largely regulated by considerations of internal security, and, as the maintenance of order in India is a primary function of the Council of the Governor-General, it would seem to us a necessary consequence that they ought to be consulted in connection with any oversea expedition or with any serious depletion of Indian military establishments.

28. As our report has already indicated, the main difficulty to be overcome in Mesopotamia was the provision of adequate river transport, and the establishment of an effective base at Basra for distribution of the reinforcements and supplies despatched to that place. We cannot but believe that, if the civilian Members of the Council had from the

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outset been taken into the full confidence of the Viceroy as regards the Mesopotamia Expedition, they would have been able to have afforded prompt and material assistance in problems, which for want of that aid and experience were allowed to drift until they temporarily became almost insoluble.

29. Another paper was presented to us containing correspondence relating to the treatment of the sick and wounded in Mesopotamia. In that paper Mr. Chamberlain, Secretary of State for India, shows a most commendable solicitude as regards the condition of the wounded, and from October, 1915, onwards, he repeatedly, urged upon the Viceroy the advisability of a prompt and special enquiry as to what was actually the condition of things in Mesopotamia. All these communications were made in private letters and telegrams, and the correspondence continued for some months until Lord Hardinge in February made the announcement to which we have previously alluded, that he had "at last succeeded in convincing the military authorities that the medical arrangements up the Tigris are as bad as can be." In the whole of this paper upon this subject there was not to be found a single official despatch.

30. If the old practice of having recourse to an official despatch had been adopted, and a despatch had been written at the outset with the full authority of the Secretary of State in Council, conveying to the Governor-General the rumours and the nature of the doubts which had arisen as regards the condition of wounded, and such despatch had been received by the Governor-General in Council, the circulation of such despatch amongst both Councils would have accelerated an investigation and prevented a great deal of the distress and suffering which occurred during that period.

31. We have dealt at some length with this matter. We consider it necessary that the attention both of the Government and Parliament should be called to the change we have thus shown to have taken place in the procedure of the two branches of the Indian Government. If the Government and Parliament are of opinion that these private personal telegrams and letters are in the future to become a recognised channel of authoritative and mandatory communication, then the Act of Parliament should be so altered.

32. As the Council of the Governor-General was not consulted, it is clear they cannot be held responsible for what occurred in the Mesopotamian campaign. On the Viceroy and the Commander-in-Chief must rest the sole responsibility for advice given and action taken, so far as India is concerned. But the exclusion of the Ordinary Members of Council from a knowledge of and touch with the varying fortunes of the expedition circumscribed the sources, from which information might have been obtained upon the condition of the army in Mesopotamia.

33. Though the organised manufacturing and industrial resources of India are small in comparison with its enormous population, still there are a number of capable civil managers, engineering experts and establishments which could have been useful in dealing with the difficulties of the Mesopotamia Expedition, if their advice or assistance had been sought in the manner and on the lines in which outside experience has been brought to the help of the military establishments in Great Britain. But the intense centralisation and isolation of the bureaucracy in India was a serious obstacle to such co-operation, for the management of the campaign was that of a close corporation in the sole charge of two over-worked officials. In this sense the exclusion of the civil members of the Viceroy's Council from all responsibility for, or participation in the fortunes of the expedition had a mischievous and contracting influence in the mobilization of exceptional outside experience to overcome difficulties, which from their novelty were beyond ordinary military knowledge and training.

D. Atmosphere of Economy up to Date of War and Effect upon Military Preparations in India.

34. The control of the expedition under the conditions, which we have explained, is narrowed down to control by two high officials, both heavily charged with many other anxious and pressing duties, and both permanently stationed in localities, which had little, if any, private or personal touch with the forces campaigning in Mesopotamia. Although the Viceroy paid a short visit to Mesopotamia early in 1915, yet in the

main it is the fact that both he and the Commander-in-Chief in their management of the expedition entirely depended upon their official information from that country. The well-being and adequate maintenance of the expedition were therefore dependent on the requisitions and demands made on Simla by the General Officer Commanding and his subordinates in Mesopotamia. It is therefore worth noting the environment, in which for years previously military officials had worked and lived, and which represented the fixed policy of the India Office and Government up to the date of the sudden outbreak of war.

35. It is a primary duty of every well-regulated Government to enforce effective economy. In other words, to prevent waste and yet ensure efficiency. Simple as is the phraseology of this formula, it is in practice most difficult to enforce, and economists, when in office, not unfrequently find themselves in defence of their principles obliged to subordinate efficiency to economy by adopting the simple process of cutting down aggregates of expenditure, or at any rate, of refusing an increase of existing outlay, no matter what may be the urgency of the fresh demand.

A policy of strict economy had been insisted on alike by the India Office and by Simla for many years, and even as late as March, 1914, in a despatch to the Government of India, the Secretary of State pointed out that the majority of the Army in India Committee (a committee appointed to overhaul Indian military expenditure), had recommended "that the normal standard of net military expenditure should be retained at 19.5 millions sterling, and that to the extent that reductions can be made in the figure by the economies we have suggested, but not otherwise, our proposed measures for the improvement of the Army should be taken in hand." The Secretary of State concluded his despatch by placing an arbitrary limit on military expenditure as regards fresh demands in the following words :—

> I am anxious to receive from you a general assurance on similar lines as to the limits within which military expenditure in the immediate future will be confined, and until you are in a position to give it I should find it difficult to deal with any separate proposals that you might submit for carrying out measures involving expense that have been recommended for adoption by the Committee.

36. Sir Douglas Haig, when Chief of the Staff, did put forward a memorandum in 1911 suggesting that the Indian Military establishments might have to furnish an expeditionary force, armed and equipped to meet a European Army. In this paper he contemplated the possibility of a war with Turkey either alone or supported by Germany; but it was stated in evidence before us that this memorandum did not receive the approval of the Viceroy, Lord Hardinge. It is a matter of common knowledge that after the Agadir incident in 1911 there was such a possibility of war with Germany as to call for military preparation and the consideration of plans of action. We know that such plans—and, to some extent, preparation—were made in connection both with the Navy and Army at home. But in India, until late in 1913 or early in 1914, no steps whatever seem to have been taken to consider what help could be given in such contingencies by the Indian Army. Still less were preparations made so to equip the Indian Army as to put it upon equal conditions with modern European troops. The responsibility for this omission must rest primarily with the Cabinet. Although the Indian Government is, to some extent, independent of the Cabinet, yet the Cabinet, through the Secretary of State for India, can exercise control and authority over its actions, but the whole influence of the Home Government was thrown in the direction of restriction rather than expansion of military preparation in India.

So far as Mesopotamia was concerned, the consequences were unfortunate—there was a lack of plans, and a lack of preparations.

Sir O'Moore Creagh was Commander-in-Chief for 4½ years ending April, 1914. In his evidence before us he stated that he was constantly calling attention to the deficiencies of the Indian Army as regards modern equipment, especially in connection with machine guns, heavy howitzers, signalling apparatus, wireless and air equipment, transport and medical complements, and to the inadequate grants made for practice ammunition and the insufficient sums voted for manœuvres. Sir O'Moore Creagh informed us that his representations had no result and were practically ignored and to such an extent was he generally over-ridden by the Finance Department and the Viceroy that he determined to resign office some six months before the usual tenure of his appointment terminated. But his

reasons for resigning were not explained either to the Viceroy or to the Secretary of State, nor can he entirely escape from criticism for not having taken more definite action at an earlier stage of his tenure of office, if he was certain that the efficiency of the Army, for which he was responsible, was being impaired by the rigid economy which in all directions was enforced upon military expenditure in India.

37 Under a policy so rigorously defined, it is not unnatural that military and medical officers thought that they were best discharging their duty to the Government by keeping down demands, by carrying on as best they could without incurring fresh expenditure, and by discouraging their subordinates from pressing new ideas or ideals which, though undoubtedly beneficial to the service for which they are responsible, would entail, at any rate at the outset, additional expenditure.

38. The Vincent-Bingley Commission report upon this tendency in language which seems to us so accurately to represent the views of many of the witnesses who appeared before us that we quote it in its entirety :—

The observations of a senior officer who has given evidence to the Commission may be quoted with advantage in this connection, as they crystallise the views of many others.

This officer writes as follows in an annexure to his evidence : "In my opinion the Indian system is more to blame for the breakdown of the Mesopotamia medical arrangements than anything else—a system which allows officers to think, whether rightly or wrongly :—

"(*a*) That there is more merit to be obtained by keeping quiet and not worrying the higher authorities than by asking for what is necessary ;

"(*b*) That keeping down expenditure is more meritorious than efficiency ;

"(*c*) That nothing new is likely to be sanctioned unless a corresponding saving in something else can be shown ; and

"(*d*) That even in small matters anything asked for will be cut down by half. . . . A system of this nature will possibly be good and economical in peace time, but is bound to break down in war."

There is, in our opinion, much force in this criticism, and though we do not accept this statement in its entirety, we are inclined to ascribe much of the delay in applying for, and the reluctance to insist on, the provision of separate river hospital steamers, proper ambulance land transport, electric fans, ice machines, and other essential requirements to this cause.

39. Assuming that such a feeling generally existed in the Indian Army, it would affect not merely the medical officers and arrangements but also the combatant officers and the whole equipment and organisation of the Indian Army. The Mesopotamia Expedition, in the first instance, was equipped as if for frontier warfare against undisciplined tribes armed only with rifles. Its wants rapidly grew ; but there is little, if anything, in the mass of communications between the India Office, the Indian Government and the General Officer Commanding in Mesopotamia to show that the authorities either in London or Simla recognised the immense differences between the conditions of an Indian frontier, and a Mesopotamian campaign.

40. Some of our witnesses expressed the opinion that the supreme Government of India did not seem adequately to realise the immensity of the issues raised by the war, and that their response to the necessities of the situation was not as whole-hearted and sufficient as it might have been. We fully recognise the internal difficulties and embarrassments which the Indian Government had to face, when the enemy to be encountered was, in his intrigues and conspiracies, as ubiquitous and unscrupulous as the German Government has shown itself to be, and we can well understand that in the earlier stages of the war the Indian Authorities had to devote much of their attention and a considerable proportion of their military establishments to counteract such machinations.

But as the dimensions of the war grew, and the character of its issues became more and more apparent, the Indian Government do not appear to us to have fully risen to the situation. It would almost seem that they acted on the assumption that the war would not be one of long duration, for they adhered to the routine method of normal times, rather than to the impressment of new ideas and the mobilisation of fresh resources.

The standard of effort was regulated more by past experience of previous war than by the magnitude of the emergency. The unprecedented exertions of Great Britain and her self-governing Oversea Dominions did not seem to stimulate the Indian Government to similar efforts. The attitude and disposition of the Indian Government are shown in the nature of the argument used by them in rejecting military railway expenditure in Mesopotamia, viz., that it might ultimately fall on Indian revenues as being possibly outside the Imperial guarantee of indemnity for extraordinary disbursements. Neither as regards compulsory service for Europeans, nor in the organisation of industrial resources for purposes of war, nor in general finance was sufficient alacrity shown during the first year and a half of the war.

D. Atmosphere of Economy up to Date of War and Effect upon Military Preparations in India.

41. As regards finance it must be remembered that the Indian Government Act, 1858 precluded the cost of overseas expeditions from being charged upon the revenues of India unless with the consent of both Houses of Parliament. In September and November, 1911, accordingly, resolutions were passed by Parliament empowering the Indian Government to defray the ordinary cost of the troops employed overseas, in so far as such ordinary cost would have been payable by India, had the troops remained in that country. Any excess over such ordinary cost was to be borne by the Imperial Government in addition to the full cost of any troops required to replace the troops sent overseas. The effect of these resolutions was that, so far as the overseas expeditions were concerned, India participated in the war without thereby incurring any direct increase of her normal military expenditure in peace time. Whatever may have been the justice of such an arrangement as regards the expedition to France, it clearly redounded to the advantage of India in the case of the expedition to Mesopotamia, which, as we have seen, was recognised by the Indian Government as a military measure protecting their North-Western Frontier from attack, and they obtained this advantage without cost to themselves. Their net military expenditure for the year 1914-15 was actually nearly £59,000 less than the estimate which had been made for that year before war was declared, and on the assumption that expenditure would be on a peace basis. In introducing the Indian Financial Statement for 1915-16, Sir W. Meyer, the Finance Member, stated: "Our chief economy occurs under the Military Services," and, though the war had already been waging for more than eight months, he budgeted for a military expenditure half a million less than the corresponding expenditure for the previous year. Although this estimate has, in fact, been exceeded by the actual expenditure, the excess, according to the latest figures available to us, has never amounted to more than £2,000,000, or 20 per cent. of the normal military expenditure in India. It is, of course, common knowledge that the United Kingdom's war expenditure represents an increase of more than 1,000 per cent., over the normal. During the period under our review no additional taxation and no loans were raised with a view to helping England in bearing the cost of a war in which the very existence of our Indian Empire was threatened. The disparity between the financial war burdens of India and the rest of the Empire was even the subject of comment in the Vice-regal Council where there was a general expectation of new taxation. One member went so far as to say in Council, "Handsome as our offerings may have been, they have not, I regret to say, been on the same princely footing and basis as that of our fellow Colonials. However, I am confident that the demand has only to be made, and loyal India will rise as one man and offer to pay the expenses of our Expeditionary Forces, in the same way as Canada and Australia are doing," and he went on to suggest an increase in taxation to meet such expenditure.

But prosperous though the country was, the Indian Government refused to listen to such suggestions. Lord Hardinge and Sir William Meyer both recognised the financial strength of India's position, but, notwithstanding the financial needs of the war, they considered it permissible for India to continue to spend a sum of 9.4 million pounds (equal to about 18 per cent. of India's Imperial revenue) on capital works, railways, irrigation, etc. In fact, to quote the words of a native member of the Council, this budget "made the country almost forget the serious economic and financial effects of the war."

It has been argued that India had no cause to be sparing in expenditure on the overseas expeditions because the Imperial Government were bearing all the abnormal cost of the war. But Sir F. Aylmer informed us that when he was Adjutant-General at Simla, the Finance Department frequently demurred to proposed new war expenditure in the fear lest the expenditure should persist after the war, and become a charge upon India, and we know that a similar motive influenced the financial officials in their dealing with Sir J. Nixon's demand for a railway.

Thus the atmosphere and influence of economy continued at Simla long after the war broke out, and there are indications of a reluctance on the part of the Indian Government to recognise the indisputable fact that war meant extra expenditure. They seemed to have struggled hard to carry on war upon a peace budget, and it is hardly open to doubt that this tendency was one of the causes of the inadequate expenditure incurred, and the lack of provision made for the wants of the Mesopotamia Expedition during the first 16 months of its operations.

The Government, rather than the governed, were the laggards, and in our judgment the measures now taken by the present Viceroy and his Council in mobilising latent

D. Atmosphere of Economy up to Date of War and Effect upon Military Preparations in India.

resources should have been adopted some time past. Much of the bitterness felt by the Expeditionary Force against their inadequate supply and equipment can, we believe, be traced to the idea that the Indian Government did not early enough realise their responsibilities, or the strain which the climate and country of Mesopotamia imposed upon all those sent there to fight.

42. So long as the expedition's advance was confined to the Shatt-el-Arab its operations were neither difficult nor costly. Every advance increased the difficulties and cost, and both centred around the transport. We can quite understand that officers, bred up to resist fresh and new expenditure, would hesitate, when an advance was suggested, to insist at once upon the outlay necessary to ensure success and diminish risk. "Risk and economy" rather than "safety and expenditure" would be the natural bent of their past training and orders. It is quite true that no evidence has been produced to show that any urgent demand put forward by the Military Authorities was definitely refused by the Finance Department. The blame for inadequate attention to the special wants of the expedition must be attached to the Military Authorities rather than to the Finance Department.

43. Pertinacity in pressing or multiplying the requisitions from Mesopotamia upon the Simla authorities was, however, resented, and of this we will give a remarkable illustration.

General Cowper was Adjutant-General and Assistant Quartermaster-General of the Mesopotamia Force. In January, 1916, he, being the officer responsible for the transport, became seriously alarmed at the increasing difficulties, which the shortage of transport created in the employment of troops for the relief of Kut. In consultation with General Money, Chief of the General Staff, he drafted a telegram in which they stated plainly that unless they got adequate shipping transport, and personnel to man such transport, Sir Percy Lake, who had recently assumed command of the force, would have to abandon the idea of relieving Kut. They purposely had recourse to this language as they considered the position—to use General Cowper's own words—"So frightfully serious." Sir Percy Lake carefully considered the telegram, and transmitted it after some alterations. In reply Sir Percy Lake received a personal telegram from the Commander-in-Chief at Simla, severely rebuking him for the wording of the telegram, and the Commander-in-Chief added these words: "Please warn General Cowper that if anything of this sort again occurs, or I receive any more querulous or petulant demands for shipping, I shall at once remove him from the force, and will refuse him any further employment of any kind."

Sir Beauchamp Duff subsequently stated to us that this reply to Sir Percy Lake's telegram was founded upon a paraphrase, which distorted both the purport and language of the telegram, and that as soon as he became aware of this, he cancelled his censure. We asked General Duff for a copy of this paraphrase, but he told us it had been destroyed.

The warning conveyed in General Cowper's telegram was, as our narrative shows, unfortunately realised, for the failure to break through to Kut was largely due to insufficiency of numbers and of guns, there being, at the critical times of the attempted relief, large numbers of troops and guns at Basra which could not be moved to the front for want of transport.

In justice to General Cowper, we must add that it was with great difficulty that we extracted the above information from him. The incident was referred to in a letter from Lord Hardinge to the Secretary of State for India and it was in consequence of this allusion that we obtained the clue to the transaction.

It seems from this letter that Lord Hardinge had complained to Sir Beauchamp Duff of the tone of several recent telegrams from Mesopotamia to Simla. And doubtless this complaint partly accounts for Sir Beauchamp Duff's annoyance. But in our judgment Lord Hardinge's complaint was altogether unwarranted, and the reprimand which it led Sir Beauchamp Duff to address to General Cowper was both intemperate and ill-advised. We fear, however, that it must be regarded as an extreme but characteristic illustration of the attitude of the authorities at Simla towards demands which they did not like or did not consider necessary.

E. Sir John Nixon's Appointment, Instructions and Staff.

44. It is obvious from Lord Hardinge's evidence that, during his official visit to Mesopotamia, he was struck by the necessity of the offensive being assumed by our forces round

E. Sir John Nixon's Appointment, Instructions and Staff.

Basra, if their defensive position was to be consolidated and made secure. Sir John Nixon had the reputation of a successful and dashing Cavalry Officer. He told us in his evidence that he believed he was sent out in order that he might make this change in the attitude of our forces around Basra. He took with him a new Staff.

45. The change by an expeditionary force from defensive to offensive tactics may, under certain conditions, be possible without necessitating fundamental changes in the organisation of the force or in the base and line of communications. In Mesopotamia, if the offensive was pushed beyond a certain point, its success or failure was almost entirely governed by the extent to which the capacity of the port of Basra, and of the communications with it, were simultaneously developed.

46. This self-evident necessity was never realised either by the India Office at home or the Government at Simla until it was too late. It is no exaggeration to say that this was an undertaking utterly beyond the capacity of Sir John Nixon and his staff. To impose upon a Cavalry Officer with little more than the ordinary staff of a Division, such a duty was to try him altogether beyond his experience and strength.

47. The instructions to Sir John Nixon to prepare a scheme for an advance on Baghdad revolutionised the whole foundation and organisation of an expedition initiated and founded for much smaller and more limited objects, and this was neither recognised by Sir J. Nixon nor those who so instructed him. He looked at the matter from a purely fighting point of view, and the military successes which he had achieved induced him to underestimate the full risk involved in an advance from Kut to Baghdad. The Government of India never seemed to question his discretion or his want of experience of a campaign dependent on river transport. Implicit confidence in his judgment was the basis of their communications to the Home Government.

48. It was not merely that, through no fault of their own, Sir John Nixon's staff were unequal to the task of creating a practically new port, but they were seriously handicapped in the very important work of obtaining reliable intelligence as to the strength of their opponents. The armies against which Sir John Nixon was operating were recruited and drawn from a vast area of territory extending from Persia to Bulgaria and from Aden to Erzerum. The military movements inside this vast extent of country were very difficult to follow, and the sources of information were such that London was better supplied with news than Simla or Basra, as nearly the whole of this area was within the scope of the Intelligence organisation of the War Office. The local area from which Sir John Nixon's Intelligence Staff obtained information was limited, and did not comprise those portions of the Turkish Empire from which reinforcements to Irak could be sent. Sir John Nixon, having confidence in his own staff, was not disposed to subordinate their information to that which came from outside.

49. Upon the two essential considerations governing the attempt to capture Baghdad Sir J. Nixon was therefore seriously at fault. He underrated the difficulty of transporting reinforcements, as they arrived, from the port of embarkation to the scene of action, and he seriously under-estimated the number of his opponents and miscalculated the dates at which they would arrive. Sufficient allowance was not made either in London or Simla for the probability of such miscalculations. The extreme difficulty of the first task and the lack of reliable information do not seem to have been properly appreciated by those controlling the conduct of the campaign. But though grave blame must be attached to Sir John Nixon for his excessive optimism, those who shared in that optimism cannot be wholly free from criticism.

F. Secretiveness and Lack of Co-ordination of Staffs.

50. The character and scope of the task imposed upon General Nixon and his Staff made it one of exceptional difficulty, and it might have been assumed that there would have been full and frequent interchange of opinion between the Headquarters and the Administrative Staffs of the Army in Mesopotamia before any fresh move was made or, if reinforcements were expected, as to how the difficulties of maintaining and

transporting such new forces could be met. General Nixon stated that Staff conferences were frequently held, but notwithstanding this, we have evidence that reticence was carried so far, that important Staff Officers were kept in ignorance of impending movements, and were consequently unable to make in time the requisite preparations.

51. Commander Hamilton who was Principal Marine Transport Officer from the beginning of the campaign until December, 1915, and, who was uneasy from the first as to the river transport situation, complained to us that the policy of the campaign was kept secret from him. At the outset of the campaign he made a proposal for providing river steamers in advance. This was not entertained by the staff at the time, and as he was not taken into their confidence as to the future movements of the expedition, he did not afterwards again press his proposal. In May, 1915, the Deputy-Director of Ordnance complained that he was never given information as to projected movements of troops. In the spring of the same year, Colonel Dallas, when Base Supply Officer at Basra, received no warning that his responsibilities were to be doubled by the arrival of a second division of reinforcements. He was not informed when advances were to be made, and he understood that other high administrative officers were also kept without sufficient information. Similarly General Davison, Inspector General of Lines of Communication, did not remember being referred to at all in connection with the transport necessary for the advance of General Townshend's force towards Baghdad. Nor was he consulted as to the provision of transport for the promised reinforcements of two divisions, until after the advance had been sanctioned, although it will be remembered that the availability of these divisions as reinforcements at Baghdad was a condition precedent to the sanction by the authorities of the advance on that place.

52. Information as to the arrival of these reinforcements was withheld until the beginning of November from so high an officer as General Cowper, the Deputy-Adjutant and Quartermaster-General in Mesopotamia, and even then he was not allowed for some time to communicate it to his administrative officers, with the result, as General Cowper admitted under cross-examination, that there was delay in making preparations for the reception of the reinforcements at Basra. According to General Cowper's evidence the reason given for keeping him in ignorance of the prospective arrival of reinforcements was fear that the news might reach the Turks, and that they would in consequence retreat without fighting.

53. Surgeon-General Hathaway, the Director of Medical Services in Mesopotamia, also contended that he was hampered in his work by his exclusion from the Staff Conferences. General Nixon disputed this, but we are convinced that, whether with or without General Nixon's knowledge, secrecy as to projected movements was maintained by the Staff to an extent detrimental to the interests of the expedition.

54. We can quite understand, in a country so full of rumour and spying as Mesopotamia, the necessity of confining to as few people as possible information concerning impending movements and requirements; but the stoppage of information was pushed to such a point that the officers, upon whose arrangements the success of the new move largely depended, were sometimes only given information after a decision had been taken. We have no evidence to show that a conference of any kind took place before General Nixon informed the Viceroy that he could open the road to Baghdad. General Nixon throughout acted solely upon his own responsibility. As one of his subordinates stated, he "revelled in responsibility"—a fine quality in a soldier and one which ought to be encouraged, but it cannot stand alone, and in the present instance this dash and audacity were not sufficiently associated with prescient preparation or with investigation of the difficulties to be overcome.

55. At Simla, Sir Beauchamp Duff, as Commander-in-Chief, was in absolute and untrammelled control over every branch of military administration. The General Staff was in no sense a separate or independent branch. The chief of that body was personally under the Commander-in-Chief and part of his staff. The other holders of high office, such as the Adjutant-General, Quartermaster-General, Director-General of Operations, were all under the direct control of the Commander-in-Chief, as was formerly the case in the War Office at home.

F. Secretiveness and Lack of Co-ordination of Staffs.

56. There were indeed almost daily meetings of the chief military officers at Simla, but we have no evidence to show that there was ever a free discussion of the danger and difficulties of the advance to Baghdad. Sir Fenton Aylmer, at that time the Adjutant-General, did hear a conversational reference made by the Commander-in-Chief to the Chief of the Staff upon the subject at one of the daily meetings of the Headquarters Staff. He at once expressed his apprehensions of such a move, but no notice was taken of his objection,

Thus, without adequate consultation with their staffs and without fully realising the vital elements of the problem, the General Officer Commanding in Mesopotamia suggested, and the Commander-in-Chief in India accepted the move upon Baghdad. As we have before stated, the Viceroy, Lord Hardinge, did not consult the Council upon this matter, but he threw the weight of his personal authority strongly in support of the advance.

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A. Findings and Conclusions.

Origin, Inception and Conduct of Campaign.

We find that:—

1. The expedition to Mesopotamia was a justifiable military enterprise, but one of such a character that it required, during its inception and development, the most careful watching and preparation.

2. The division of responsibility between the India Office and Indian Government, the former undertaking policy, and the latter the management of the expedition, was, in the circumstances, unworkable. The Secretary of State, who controlled the policy, did not have cognisance of the capacity of the expedition to carry out the policy. The Indian Government, who managed the expedition, did not accompany developments of policy with the necessary preparations, even when they themselves proposed those developments.

3. The scope of the objective of the expedition was never sufficiently defined in advance, so as to make each successive move part of a well-thought-out and matured plan.

4. The attempt in India entirely to control and regulate the wants of the expedition from Simla was an administrative mistake, and representatives of the Headquarter Staff with wide powers should from the first have been stationed at Bombay the port of embarkation and disembarkation to and from Mesopotamia.

5. The Commander-in-Chief himself, or his representatives acting as liaison officers, should from time to time have visited Mesopotamia with a view to keeping the Headquarters Staff in touch with the needs of the expedition. In consequence of such want of touch, the Military Authorities at Simla did not appreciate or realise the difficulties of campaigning in Mesopotamia, and from such lack of knowledge failed to make sufficient provision for surmounting the difficulties and drawbacks.

6. The successive advances from Basra to Kurna, Kurna to Amara, and from Amara to Kut were sanctioned as being necessary for the protection and consolidation of positions already taken, and were therefore of a defensive character.

The Advance on Baghdad.

7. The advance to Baghdad under the conditions existing in October, 1915, was an offensive movement based upon political and military miscalculations and attempted with tired and insufficient forces, and inadequate preparation. It resulted in the surrender of more than a division of our finest fighting troops and the casualties incurred in the ineffective attempts to relieve Kut amounted to some 23,000 men. The loss of prestige associated with these military failures was less than might have been anticipated, owing to the deep impression made, throughout and beyond the localities where the combats occurred, by the splendid fighting power of the British and Indian forces engaged.

8. Various authorities and high officials are connected with the sanction given to this untoward advance. Each and all, in our judgment, according to their relative and respective positions, must be made responsible for the errors in judgment, to which they were parties, and which formed the basis of their advice or orders.

The weightiest share of responsibility lies with Sir John Nixon, whose confident optimism was the main cause of the decision to advance. The other persons responsible were: in India, the Viceroy (Lord Hardinge), and the Commander-in-Chief (Sir Beauchamp Duff); in England, the Military Secretary of the India Office (Sir Edmund Barrow), the Secretary of State for India (Mr. Austin Chamberlain), and the War Committee of the Cabinet. We put these names in the order and sequence of responsibility. The expert advisers of the Government, who were consulted, also approved the advance and are responsible for their advice, but the papers submitted to us suggest that the approval of the naval and military experts was reluctant and was perhaps partly induced by a natural desire not to disappoint the hopes of advantage to the general situation, which the Government entertained. It is, however, notable that the experts unanimously anticipated no difficulty in the advance on Baghdad, but only in holding it. We do not attach any share in the responsibility for the decision to advance to Baghdad to the Councils of the Secretary of State

A.—Findings and Conclusions.

for India and of the Viceroy, as we have been unable to ascertain from the evidence laid before us that the advance to Baghdad was ever brought before them in such a manner as to allow them to give their personal advice and opinion upon it.

9. We have included the War Committee of the Cabinet and the Secretary of State for India amongst those upon whom responsibility for this misadventure rests. It is true that the War Committee and the Secretary of State acted upon the opinion of their expert military advisers, and that the Secretary of State only gave his assent to the advance after he had received an assurance from the General on the spot that he had an available force sufficient for his purpose. But so long as the system of responsible departmental administration exists in this country, those who are political heads of departments in time of war, whether they be civilian or military, cannot be entirely immune from the consequences of their own action. They have the option and power of accepting or rejecting the advice of their expert subordinates. The acceptance by a chief of wrong advice from expert subordinates may be an extenuation of, but cannot secure complete immunity from, the responsibility for the evils which may ensue.

The Cabinet from the first laid down the principle, from which they never departed, that questions jointly involving civil and military policy should, in existing circumstances, only be decided by the Cabinet. This authority they exercised throughout, though at times they largely delegated their powers to the War Committe of the Cabinet.

Supplies, Equipments, Reinforcements, etc.

The second portion of our Instructions refers to the supplies, equipment and reinforcements of the expedition, with special reference to the provision for the sick and wounded, and the responsibility of the departments whose duty it was to minister to such wants. Upon this part of our reference we find that :—

10. The general armament and equipment were on a scale intended for an Indian frontier expedition, were not up to the standard of modern European warfare, and were quite insufficient to meet the needs of the Mesopotamia Expedition. These shortcomings were the natural result of the policy of indiscriminate retrenchment pursued for some years before the war by the Indian Government under instructions from the Home Government, by which the Army was to be prepared and maintained for frontier and internal use.

11. During the period for which the Indian Government were responsible, the commissariat of the expedition cannot be said to have been up to the standard of our Army in France, but there was no general breakdown. Discomfort and want were at times experienced, mainly through lack of transport, and as we point out in our Medical Section, illness arose from serious deficiences in diet. The whole system of supply was on too low a standard, and was badly organised. We have reason to believe that it has been materially improved since the War Office became responsible for the commissariat.

The ration originally supplied to the Indian troops was deficient in nutritive qualities, and a serious outbreak of scurvy ensued. Since then this ration has twice been improved, but it still requires careful attention as to the adequacy of its nutritive powers.

In other essentials the expedition was badly and insufficiently equipped, and as we have shown in previous parts of our report, little, if any, effort was made to remedy deficiencies until the War Office took over the expedition. It is difficult to arrive at any conclusion in this part of our enquiry other than, that the wants of the expedition received meagre attention and illiberal treatment at the hands of the Simla authorities during the years 1914-1915.

12. As regards reinforcements, we find that up to the occupation of Kut in September, 1915, the Mesopotamian Expedition was, in fact, numerically strong enough to cope with the Turkish forces brought against it. The arrangements for drafts and reinforcements had, however, from the first, been lacking in co-ordination as between the Indian and Home authorities, and this want of co-ordination led to the failure to supply effective reinforcements in connection with the advance on Baghdad and the operations for the relief of Kut.

Transport.

13. The enquiries we have made, and the evidence, both oral and documentary, which we have taken in this part of our investigation, lead us to the following conclusions regarding the critical period up to April, 1916 :—

(*a*) From the first the paramount importance, both of river and railway transport in Mesopotamia, was insufficiently realised by the military authorities in India.

A. Findings and Conclusions.

(*b*) A deficiency of river transport existed from the time the army left tidal water and advanced up-river from Kurna. This deficiency became very serious as the lines of communication lengthened and the numbers of the force increased.

(*c*) Up to the end of 1915 the efforts made to rectify the deficiency of river transport were wholly inadequate.

(*d*) For want of comprehensive grasp of the transport situation and insufficiency of river steamers we find the military authorities in India are responsible. The responsibility is a grave one.

(*e*) River hospital steamers were an urgent requirement for the proper equipment of the expedition, and were not ordered until much too late.

(*f*) With General Sir John Nixon rests the responsibility for recommending the advances in 1915 with insufficient transport and equipment. The evidence did not disclose an imperative need to advance without due preparation. For what ensued from shortage of steamers, General Sir John Nixon must, in such circumstances, be held to blame. The extent of his responsibility in relation to the sufferings of the wounded is considered in Part X. of our Report and in para. 17 below.

(*g*) During the first four months of 1916, the shortage of transport was fatal to the operations undertaken for the relief of Kut. Large reinforcements could not be moved to the front in time to take part in critical battles. Based upon information received from General Townshend, as to the urgent necessity for his immediate relief, operations were undertaken, notwithstanding the extreme transport difficulty, but in all the circumstances we do not attach blame for this to the Generals in Mesopotamia directing the operations.

(*h*) Facilities for the discharge and handling of cargo at Basra, also provision of works for the erection and repair of river craft, were hopelessly inadequate.

(*j*) Proceedings in connection with the filling of orders for river craft by the Director of the Royal Indian Marine in India, and the India Office in London, were far from satisfactory.

(*k*) Looking at the facts, which from the first must have been apparent to any administrator, military or civilian, who gave a few minutes' consideration to the map and to the conditions in Mesopotamia, the want of foresight and provision for the most fundamental needs of the expedition reflects discredit upon the organising aptitude of all the authorities concerned. General Sir William Robertson, Chief of the General Staff, Whitehall, in a document to which we have already referred, states: "In general, the operations were allowed in 1915 to develop without proper regard to the vital questions of supply and maintenance," in which opinion our investigations lead us unreservedly to concur.

Medical Provision.

As regards the treatment of the sick and the wounded, our conclusions are more lengthy and minute, as this part of our enquiry necessitates close examination into details.

We find that:—

14. The medical provision for the Mesopotamia Campaign was from the beginning insufficient; by reason of the continuance of this insufficiency there was a lamentable breakdown in the care of the sick and wounded after the battle of Ctesiphon and after the battles in January, 1916; there was amelioration in March and April, 1916; but that since then the improvement has been continual until it is reasonable to hope that now the medical provision is satisfactory.

15. The defects of medical provision caused avoidable suffering to the sick and wounded, and during the breakdown in the winter of 1915–16, this suffering was most lamentably severe.

16. The deficiencies, which were the main causes of the avoidable suffering of the sick and wounded, were in the provision of the following:—

(*a*) River hospital steamers.
(*b*) Medical personnel.
(*c*) River transport.
(*d*) Ambulance land transport.

A.—Findings and Conclusions.

To these fifth and sixth main causes may be added in respect to the operations in January 1916 :—

(*e*) The absence of the medical and supply establishments of the 7th Division.

(*f*) The premature efforts to relieve Kut in consequence of the erroneous estimate of supplies in that place.

17. As to personal responsibility the Vincent-Bingley Commission found :—

That a grave responsibility for that part of the suffering which resulted from avoidable circumstances rests with the Senior Medical Officer of the Force, Surgeon-General G. H. Hathaway, and with General Sir John Nixon, the General Officer Commanding the Force, from April 9th, 1915, to January 19th, 1916. General Hathaway did not represent with sufficient promptitude and force the needs of the services for which he was responsible, and in particular failed to urge the necessity for adequate and suitable transport for the sick and wounded with that insistency which the situation demanded. General Nixon did not, in our opinion, appreciate the conditions which would necessarily arise if provision for the sick and wounded of his force were not made on a more liberal scale.

We endorse the finding as regards Surgeon-General Hathaway who in our judgment showed himself unfit for the high administrative office which he held.

We may add, however, as regards River and Land Transport, that while it was the duty of Surgeon-General Hathaway to urge its necessity, it was actually the duty of the Quarter-master General's Department and of Sir John Nixon's staff to see that it was provided.

So far as Sir John Nixon is concerned, however, we think that he was throughout solicitous as to the condition of the wounded. The main mistake he made, was to rely too absolutely on the statements made to him by his Deputy-Director of Medical Service, Surgeon-General Hathaway ; to that extent he may be blamed, but he stands, so far as responsibility is concerned, in a very different position from that occupied by Surgeon-General Hathaway.

18. The officer directly responsible for the deficiencies of medical provision in Mesopotamia, is however, the Director of Medical Services, India. This appointment was held at the beginning of the war by Surgeon-General Sir William Babtie, who held the office between March, 1914, and June, 1915, but was away from India for six weeks in February and March, 1915. He was succeeded by Surgeon-General J. G. MacNeece on July 8th, 1915, and the latter proceeded home on sick leave on April 15th, 1916. Sir William Babtie in his evidence before us impressed us as an officer of ability and knowledge, but we do not think that he brought these qualities sufficiently to bear upon the task before him. He accepted obviously insufficient medical provision without protest, and without any adequate effort to improve it. He cannot therefore be held blameless.

Surgeon-General MacNeece did not give evidence before the Vincent-Bingley Commission, but he appeared before us. He was, in our opinion, an officer thoroughly desirous of fulfilling the duties assigned to him ; but he was a man of advancing years and diminishing strength, unequal to the position he was called upon to fill, and his administration appears to us to show no signs of the vigour and efficiency that were required.

19. We find that :—

(*a*) The Home Government agreed with the Indian Government in limiting the general military preparations of India before the war in the interests of retrenchment, and provision was accordingly not made for such an expedition as that to Mesopotamia. The limitation of medical preparation and the low standard of medical treatment in the Indian Army at the outbreak of war were the natural outcome of this policy, which was pursued for many years and was in force right up to the date of the war.

(*b*) The private letters of the Secretary of State to the Viceroy showed an earnest and continuous anxiety as to the condition of the wounded, and the only comment that can be made upon the Secretary of State's procedure is that he did not fully utilize the official powers at his disposal for the purpose of forcing at an earlier period an investigation into the treatment of the wounded in Mesopotamia.

(*c*) To Lord Hardinge of Penshurst, as Viceroy, belongs the general responsibility attaching to his position as the head of the Indian Government, to which had been entrusted the management of the expedition, including the provision of medical services. In regard to the actual medical administration he appears to us to have shown throughout the utmost goodwill, but considering the paramount authority of his office, his action was not sufficiently strenuous and peremptory.

A. Findings and Conclusions.

(*d*) A more severe censure must be passed upon the Commander-in-Chief, for not only did he, as Commander-in-Chief of the Army in India, fail closely to superintend the adequacy of medical provision in Mesopotamia, but he declined for a considerable time, until ultimately forced by the superior authority of the Viceroy, to give credence to rumours which proved to be true, and failed to take the measures, which a subsequent experience shows would have saved the wounded from avoidable suffering.

20. There has been misuse of official reticence as to medical defects and the sufferings of the sick and wounded.

21. While the protective and sanitary work of the Medical Administration has in certain directions and at some periods (notably under Colonel Hehir) been commendable, yet there has not been generally sufficient promptitude in taking the precautions dictated by modern science for the protection of the troops against disease.

22. Throughout the campaign (with insignificant exceptions) the executive and regimental medical officers and personnel have devoted themselves with unremitting kindness, zeal and industry to the care of the sick and wounded with such means as were at their disposal.

Indian Frontier and Internal Troubles.

23. In the information laid before us by high authorities as to the military requirements of India, there was constant reference made to the ever-present risk of invasion on the North-West Frontier and the danger of simultaneous internal disturbance. We are satisfied of the reality of such dangers and of the necessity of keeping mobilised a large force on this frontier. There is little doubt that on more than one occasion since the outbreak of war the Indian Government passed through a period of grave anxiety, which they successfully surmounted. The preoccupation caused by this anxiety must not be forgotten in blaming the Indian Government for the inefficiency of the management of the Mesopotamian campaign.

General Results of the Expedition.

24. The character of the Instructions given to us as a Commission and the date of our appointment compelled us to devote a large proportion of our time and attention to that limited period of the campaign in Mesopotamia in which reverses were experienced by our troops. We have probed to the best of our ability the causes of these failures in order to make suggestions for their remedy and removal. Though we have spent so large a portion of our time in looking into a period of reverses, this should not overlay or obliterate the fact that the success of the campaign has, as a whole, been remarkable. The operations have lasted over 2½ years, and, with the exception of a few months during which there was a serious setback, the war has been an unbroken success. Up to the date of the advance to Baghdad, in November, 1915, continuous victory had been achieved by the Expeditionary Force. During the last few months the river transport has been increased, port facilities improved, the force has been re-organised and adequately equipped for the task before it, and it has resumed its career of victory. We are of opinion—reviewing the operations as a whole—that it may now be truly asserted that in the many parts of the world in which the Allied Forces have been engaged, no more substantial results or more solid victories have been achieved than those won by the gallantry of the British and Indian Armies on the stricken plains of Mesopotamia.

Moral of Troops.

25. Our investigations show that what is in default is not the fighting capacity and efficiency of the combatant forces of the Indian Army, but the system of military administration in control of that Army. Rarely, if ever, have greater courage or pertinacity been shown by British and Indian troops than is recorded in the operations of the Expeditionary Force both during their successes and reverses. They had to operate under unfavourable conditions of climate, weather, flooded terrain insufficient supplies and wholly inadequate transport, and they were surrounded by a hostile and marauding population. In out judgment, no praise can be too high for the gallantry and spirit evinced by the officers and men of all ranks of the British and Indian Armies under this accumulation of difficulties. It is most desirable that the governing machinery of the Indian Army should be so reformed as to enable it to be a help and not a drag on the fighting capacity of the armies it controls.

A. Findings and Conclusions.

Nature of Criticisms on Indian Government.

The criticisms which it has been our duty to make upon the Government of India divide themselves into two categories :—

26. Those relating to the error of judgment shown by their advocacy of an advance to Baghdad in October, 1915. In this mistake other authorities participated and we are not disposed to say more on this matter than that, lamentable as were the consequences, the blunder was one, which is not uncommon in a protracted campaign.

27. Our second criticisms are of a different character. They relate to the failure adequately to "minister to the wants of the forces employed in Mesopotamia." This failure was persistent and continuous and practically covered the whole of the period during which the Indian Government were entrusted with the management of the expedition. With the knowledge of the facts which we now possess and of the extent and scope of the preparations of the War Office since they undertook the management of the campaign. it is impossible to refrain from serious censure of the Indian Government for the lack of knowledge and foresight shown in the inadequacy of their preparations and for the lack of readiness to recognise and supply deficiencies. They ought to have known, and with proper touch with the expedition they could have known, what were its wants and requirements. It is true that their military system of administration was cumbrous and inept. It was, however, within the power of the Viceroy and the Commander-in-Chief to have established a more effective procedure and a closer touch with the expedition itself.

B. Recommendations.

In the enquiry which we have made and the evidence which we have obtained we have received much information as regards the inner working of the highest branches of administration of the Indian Government both in England and India. We assume that it will not be outside our duty if we briefly refer to them for the purpose of making certain recommendations with a view to preventing a recurrence of the want of foresight and of efficiency, which our investigations have revealed.

Relations between Secretary of State and the Viceroy and Their Respective Councils.

28. We have more than once alluded to the great increase in the number of private telegrams exchanged on official business between the Secretary of State for India and the Viceroy. Whether intentionally or not, this method of communication must more or less deprive the Councils of both these high officials of the powers which, under Acts of Parliament, they have in common with the Secretary of State and Viceroy, been given in the government and administration of India. The Secretary of State informed us that he proposed to make some change so as to limit the scope and purport of such private communications. Some change is certainly constitutionally required, as the present practice seems to us to conflict with the intentions of Parliament. If the Councils of the Secretary of State and Viceroy are to be dispossessed of their old powers, such a change should be effected openly under an Act of Parliament and not by a change in the internal procedure of the India Office. Independently of the question of the legality of the present practice, the increase in the use of private telegrams must tend to accumulate work into the hands of an already heavily worked Viceroy. In our judgment, the aim of administrative reform in India, certainly in the military departments, should be a devolution of responsibilities and duties from the over-centralised bureaucracy of the Supreme Government at Simla.

Military Administration.

29. It is clear that the combination of the duties of Commander-in-Chief in India and Military Member of Council cannot adequately be performed by any one man in time of war, and that the existing organisation is at once over-centralised at its head, and cumbrous in its duality below. This was fully admitted by the Secretary of State for India, Mr. Chamberlain, and he gave us reason to believe that changes will be made enabling the official who ostensibly holds the post of Commander-in-Chief adequately to perform his functions of personal inspection, and investigation of the efficiency and requirements of

the forces under him. We hope that amongst these changes there will be an amalgamation into one department of the two existing departments of the Commander-in-Chief and the Military Member of Council with a single and central registry, and that special efforts will be made to diminish the amount of minute-writing and to simplify the present elaborate system of clerical checking and counter-checking.

30. It is also clear that, so long as Simla remains the Headquarters of the Army Departments, it is essential that in the event of oversea expeditions, there should be established at the port of embarkation representatives of the Army Departments with wide power to act without reference back to Headquarters.

Necessity for Enquiring into Certain Military Questions.

31. We have heard some evidence to the effect that the Indian Army has lost its old popularity, and that it is no longer regarded as a satisfactory service from a professional point of view, and that officers anxious for advancement prefer serving at home on account of the better methods of instruction and training which the Home Army now affords. It may be that some such ideas have deterred senior officers from accepting employment in India; but we understand that the candidates for commissions in the Indian Army at the present moment show no falling off either in numbers or quality. There was undoubtedly a grievance as to the conditions of promotion in the Indian Army compared with those prevailing in what used to be known as "the King's Army," but this disparity has to some extent been recently modified. In both armies promotion in the lower ranks is practically by seniority (in the Indian Army with time limitations), and in the higher grades by selection. It has further come to our notice that there is little personal contact between the Secretariat Departments of the Indian Army and the combatant ranks, and that in consequence there is not that sympathetic exchange of opinion and knowledge between the administrative branches and the executive forces of the Army which is essential to harmonious co-operation. There seems to be so much writing, that military officials have inadequate time at their disposal for inspecting, training and testing the troops, for whose efficiency and equipment they are responsible. These are evils which can without much difficulty be corrected, if the Indian Government, profiting by experience, will seriously take into consideration the defects in their military methods.

32. But other and more important considerations have been brought prominently to our notice in the course of our enquiries. The dual system under which London and Simla tried to conduct the campaign in Mesopotamia has obvious drawbacks. The chain of responsibility is greatly lengthened by the number of authorities, who had necessarily to be consulted, and who had a voice in the direction of affairs. We will enumerate the various authorities who had to be consulted as regards the Mesopotamia Expedition: First, the General Officer Commanding on the spot in Mesopotamia, then the Commander-in-Chief in India, then the Viceroy, then the Secretary of State for India with his Military Secretary, then the War Council with the Imperial Staff, and finally the Cabinet. Such a subdivision of authoritative control must weaken the sense of responsibility of each authority consulted, and it certainly has made it very difficult accurately to apportion blame or credit. It was under the dual system that the administrative failures took place during 1915 and early in 1916 in Mesopotamia, and it was not until London took over the sole charge that there was any marked improvement in the management of the campaign. The improvement and success since effected are a striking illustration of the all-importance of unity of control in time of war.

We should also like to call attention to the manner in which the army in India suffered during the era of economy before the war, when the military estimates were ruthlessly cut down, often, it is to be feared, without due consideration. The result was that the army was inadequately equipped, not only for an oversea expedition, but even for frontier requirements. We also gather that there is general dissatisfaction at the system of microscopic financial control exercised over details of military expenditure, pay and allowances. We give in an appendix* a few illustrations of how hardly this system operates in individual cases.

Finally it has been admitted by practically all the witnesses examined upon the subject that the principles, upon which the system of reserves for the native army of India had been established had proved faulty and unreliable. The men were too old, and had forgotten their training. It was also conceded that a new scheme on different principles

* See Appendix IV.

B. Recommendations.

must be created, if this latent force was for the future to be considered a real and not a mere paper reserve.

We do not think that we have travelled outside our province in calling attention to these important points, or in suggesting that into them and other germane matters investigation should be made by the Secretary of State for India and the Secretary of State for War.

It is in our judgment most undesirable that the standard of efficiency in the Indian Army should in any sense become inferior to that of the Army at home, or that the popularity of the Indian Army should be allowed to deteriorate through an excess of economical zeal or a questionable system of supervision and control.

Royal Indian Marine.

33. We feel strongly that the Royal Indian Marine Department requires reorganisation with a view to giving its Director a higher status and a staff adequate to his work.

Medical Reform.

34 The evidence put before us indicates the necessity for certain immediate changes in the existing system of medical organisation in India, which we propose to enumerate.

35. We are of the opinion that :—

(*a*) The Director of Medical Services in India, in war-time especially, should have far greater powers, than he at present possesses, to authorise expenditure and make purchases, and to delegate such power to his subordinates. The present elaborate system of financial check and counter-check, and correspondence with other military departments, before what is wanted can be obtained, has proved from its dilatoriness a real danger in war-time.

(*b*) Whenever an expedition is sent overseas from India, responsible officers should at once be located at the port of embarkation, with wide power to act. We have referred elsewhere to the fact that the Commander-in-Chief never visited Bombay during the crisis of the campaign. Some of his staff did do so, but their visits were spasmodic, and in no case had these officers power to give orders or settle important questions without further reference to Simla or Delhi. Further, all power being concentrated at Headquarters the ruling authorities deprived themselves of the value of being in constant touch with those going to, or returning from, Mesopotamia. If it was true, as alleged, that the Headquarter Staff at Simla were tied to their secretariat work there, the Bombay Government was on the spot, and common-sense would have suggested the delegation of authority to a Government so conveniently situated,

(*c*) At the port of embarkation the embarkation staffs should be responsible for seeing that the equipment and personnel of each medical unit should not be separated in different vessels, but embarked together in the same vessel. This rule was frequently neglected at Bombay.

(*d*) There should be an immediate and general improvement in the whole standard of comfort and accommodation in the hospitals for British troops in India. Surgeon-General MacNeece stated "even now there are practically not more than two or three up-to-date military hospitals in India." We are glad to note that the new war hospitals in Bombay are reported by the Vincent-Bingley Commission as bearing favourable comparison with any similar hospitals in the United Kingdom. This shows what can be done in India when there is impulse to reform. We think it discreditable to the Indian Government that the general standard of hospitals in India should fall below the standard of efficiency now demanded in Military Hospitals at home. To assist in reforming this state of things, we think that the R.A.M.C. or a corps on similar lines should be available for service in all British Hospitals in India, and that a better and more complete female nursing service should also be organised.

(*e*) As regards the medical treatment of Indian troops, no time should be lost in substituting a Station Hospital system, for the present regimental treatment, "I doubt," one I.M.S witness says to us, "whether you gentlemen would consider that the Sepoys' hospitals in peace-time in India are hospitals at all." Sir Havelock Charles described them as "a disgrace to the Government of India." Surgeon-General MacNeece states "there are no well-equipped operating theatres, X-ray rooms, laboratories, etc." ;

and Sir William Babtie, " they are so bad that I think it would be necessary to reform them *ab initio*." The new Indian hospitals should be staffed by enlisted personnel of all ranks, and should be used for building up trained reserves of menial establishments in peace time.

(*f*) All deficiencies usually allowed to prevail in peace-time in the mobilisation equipment of general hospitals should be made good. Sir W. Babtie told us that of the general hospitals in India. " Twelve were supposed to be mobilisable, but only four were complete in all the different Departments of supply." All such equipment should be stored and in readiness, and inspected, as is done now, in the case of field ambulances, casualty clearing hospitals and stationary hospitals.

(*g*) Base Depôts of Medical Stores should be reintroduced into the Indian Field Service organisation, and kept ready for mobilisation.

(*h*) At the outset of every campaign there should be provided a separate superior sanitary organisation and staff charged with the arrangements for preserving and safeguarding the health of the fighting troops, and responsible to the Principal Medical Officer of the force, but otherwise entirely separate from the organisation for the care of the sick and wounded. This implies a formation in peace-time of an adequate reserve of sanitary officers, enlisting in it, if necessary, the services of specialists in civil employment.

(*i*) The Field Service Ration should receive very careful reconsideration and alteration in the light of experience in Mesopotamia. This especially applies to the rations for Indian troops. The War Office Sanitary Committee found that even, " the improved ration " sanctioned as late as October last was deficient in many respects.

36. The above are only some of the defects revealed by our investigations, but they are sufficient to prove the necessity for an urgent, and thorough reform by the Indian Government of the whole system, upon which their medical services are based, and under which they are controlled. Sir Alfred Keogh, whose administration at the War Office as Director-General Army Medical Services has been very successful during this war, at the conclusion of his evidence made the following very strong statement :—

" I have no hesitation whatever in saying that the medical arrangements connected with the Army in India have been for years and years most disgraceful. I say that with a full sense of responsibility. I have served many years in India. I have not been there for some time now, but in my opinion things are not better than they were. Anything more disgraceful than the carelessness and want of attention with regard to the sick soldier in India it is impossible to imagine."

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37. Our colleague, Commander Wedgwood, has written a dissentient Report. It contains much that is interesting and, in many important points, it differs from our own Report rather in emphasis than in substance. Thus, for example, in Part XI., paragraphs 40–41 of our Report we have called attention to the Indian Government's lack of alacrity in mobilising the resources of India for the assistance of the Empire in the war, a feature upon which Commander Wedgwood lays so much stress in his Report. But we do not think the evidence before us justifies attaching to Lord Hardinge and Sir Beauchamp Duff alone the blame for the mistakes and shortcomings connected with the Mesopotamia Expedition. We have given reasons for a wider, and, in our judgment, a more equitable apportionment of responsibility.

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38. In our investigations we have been confronted by an enormous mass of written evidence. Sir Beauchamp Duff supported his oral evidence by over forty Blue-books and other documents drawn up by the Headquarters Staff in India. They were admirably edited and annotated. But this mass of written evidence, as well as the many other documents

which poured in from all sides, and which had to be mastered before witnesses could be examined, at times made the work of the Commission very severe. It would have been impossible for us adequately to have discharged our duties and to issue a Report as quickly as we have done had it not been for the ability, industry and powers of organisation of our Secretary, Mr. R. G. Duff. His assistance was invaluable, and we wish to commend his services to the head of the Department to which he belongs. He was also well seconded by Mr. J. W-Fitzwilliam, our Assistant Secretary.

(Signed)—

GEORGE HAMILTON,
Chairman,

CYPRIAN A. G. BRIDGE.

DONOUGHMORE.

NEVILLE G. LYTTELTON.

HUGH CECIL.

JOHN HODGE.

ARCHIBALD WILLIAMSON.

Signed by the Commission,
May 17th, 1917.

R. G. DUFF,
Secretary.

SEPARATE REPORT

BY

COMMANDER J. C. WEDGWOOD, D.S.O., M.P.

1. I was added to the Commission by direct vote of the House of Commons as a Member of Parliament who had seen a considerable amount of fighting. The fact of my having been fighting may unwittingly have led me to be unduly severe on those who sit behind and send other men to the front. Even making all allowance for this bias, I still find differences, and differences of principle, between myself and my colleagues that make the signing of their report impossible to me.

Minor points of difference.

2. It is not necessary to waste time over minor points of difference. To attribute the disasters in Mesopotamia to the use by the Secretary of State of private telegrams, or to Lord Kitchener's old changes in the army in India seems to me to shew some lack of a sense of proportion. If all the telegrams that were private had been public, and if there had been a Military Member of Council in addition to Sir Beauchamp Duff, I do not think even then, so long as the attitude of the Indian Administration remained the same, there would have been much difference in result; there might have been less decision, there might have been more friction.

Mistakes or Crimes?

3. My chief difference from my colleagues goes much deeper. They distribute blame over many, in India, in Mesopotamia, and at home; but censure for honest human error has nothing in common with the censure we should pass on an attitude of unwillingness to help in war. If we confound mistakes with crimes the result is a dangerous leniency towards crime.

The Decision to Advance.

4. As honest error I class any mistake that may have been made in authorising the 1915 advance on Baghdad, by the "Military Secretary of the India Office, the Secretary of State and the War Committee of the Cabinet." Indeed I maintain that the publication of the evidence will completely absolve from all blame both the Military Secretary, Sir Edmund Barrow, and the War Committee. With the material put before them from Mesopotamia and India they would have deserved as much, if not more, censure had they decided, not for, but against the advance. It will be a bad day for our Empire when soldiers and statesmen decline all risks, and withdraw confidence from the men on the spot.

General Nixon's Advice.

5. It is possible, too, to regard as honest error General Nixon's mistake in urging the Bagdad advance with wholly insufficient transport. He was at least enthusiastic and ready to take risks, and to do what I suppose he thought best for his country; while from another point of view it would be as futile to censure General Nixon as to censure any other of the 21 general officers of the Indian Army whom it has been found necessary to relieve of their commands in the field. They are the natural result of Indian Army Government, belonging to an old type, brought up to be what they are, and deprived by long residence among Eastern subjects of that energy, wider patriotism and education which is essential for the successful prosecution of a great war. An administration that was content with this type and selected the generals to command in Mesopotamia, that knew them for what they were and yet let the expedition be run as "nobody's child" must be held responsible for what happened in Mesopotamia.

Starving the Army in India.

6. One can hardly regard even as an error the effort made by Lord Crewe and the Cabinet to reduce the cost of the Indian Army before the war. My colleagues, in implying censure upon him and earlier Secretaries of State in this matter, seem to me to miss the point. Economy under the new conditions of friendship with Russia there might well

have been at that time; but it should have been directed by the authorities in India rather towards obtaining a smaller and efficient force than towards keeping the force large but starving it of modern military accessories. It was this latter policy, pursued by India for some years previous to the war, that made the Army as ill-found as indicated in my colleagues' report; and for this policy it was hardly the Government in England that was responsible. Further, the responsibility of the Indian Government in this respect is a responsibility, not for an error, but for reluctance to interfere with the vested interests of a corporation of their servants.

Personnel and Training.

7. If the equipment of the Indian Army when war began was inadequate and out of date, strictures hardly less severe must be passed upon the personnel. Evidence laid before us has shown that the standards for the higher commands have deteriorated since the Boer War, and the exceptionally long list of Anglo-Indian generals who have been relieved of their commands in the field cannot be entirely set down to the normal retirement of the aged in a war that demands young men. Nor are Mid-Victorian manœuvres, carried on without such modern accessories of warfare as mechanical transport, air park, wireless telegraphy, barbed wire, flares, entrenching tools, with wholly inadequate telephones, and with two-wheeled hospital tongas drawn by bullocks, likely to be of much help as training. And a considerable part of the Army in Southern India seem to have no manœuvres at all, even of this unsatisfactory nature.

Reserves.

8. The same feeling of security and eastern lassitude that was content with an Army of this description led to the acceptance of a system of reserves of officers and men which must in any case have completely broken down directly war came. The reserve system for the Native Army (rank and file) seems to have been well adapted to foster the loyalty of political pensioners, but the old men who returned to the colours were unsuitable for soldiers; a reserve scheme should be concerned principally with military efficiency.

A reserve scheme for white officers had been drawn up, but as little or no pecuniary inducement was held out to young white civilians to join the Indian Army Reserve, only 43 such officers existed at the beginning of the war. The Indian Government have since had to draw over 2,600 Indian Army Reserve officers out of India and to give them such hasty training as was possible.

If no provision was made for a reserve of white officers there was the less excuse for allowing old-fashioned prejudices against colour to stand in the way of the formation of an adequately trained cadre of Indian officers which the native rulers of India would willingly have supplied. From evidence tendered to us it is evident that a change in this direction would not be unwelcome to the English officers in the Indian Army.

Value of Indian Army.

9. In spite of being ill-equipped, ill-trained, and resting on paper reserves, the regimental officers and the rank and file of the Indian Army have fought in a manner to show that, with proper drafts and properly trained and equipped, they would have few or no superiors. The victories at Kut and Ctesiphon—at Ctesiphon where 35 per cent. of the whole army fell on the field and yet that army was victorious,—as well as the bloody attacks at Wadi and Sannah that were made again and again over an open plain through deep mud in the face of hopeless odds and almost certain failure, have led to an entire reconsideration of the value of the Indian Army. They are worth something better than management and control by eastern lethargy and bureaucratic incompetence. There is no fault to find with the younger men of the Anglo-Indian Army, but they lose stamina with long residence in the East.

The good change in the Control.

10. The success that has attended the Army of Mesopotamia since the conduct of the campaign was taken over by the War Office, the change that has come over the feeding, the cheerfulness, the morale, of that Army, are palpable to the public eye. That this is due in part to the energy of the War Office, and to the excellent officers they have sent out I should be the last to deny. But when all allowance has been made for this, the change cannot but be largely accounted for by the previous attitude of the Indian Government towards the expedition, an attitude which they adopted not only to the expedition but towards the war as a whole.

11. It is precisely Lord Hardinge and Sir Beauchamp Duff whom I cannot merely charge with honest human error. They, and they alone, as is shown by my colleagues, formed and were the Indian Administration during that part of the war under consideration. Throughout their conduct of the war they seem to me to have shown little desire to help and some desire actually to obstruct the energetic prosecution of the war. As a reason for this obstruction they gave—the situation in India; and I for one feel no sense of obligation to them for placing "risks" in India above the dire necessities of the British Empire, and the welfare of their own troops in Mesopotamia.

To charge two high officials with "little desire to help and some desire actually to obstruct the energetic prosecution of the war" is a serious accusation, and one difficult to accept. I have therefore felt bound to support it by a considerable body of evidence. Such evidence must necessarily take the form of extracts without context (till the evidence is published in full), extracts from letters or cables from Lord Hardinge or Sir Beauchamp Duff, extracts from protests by Lord Kitchener or Lord Crewe, extracts from speeches by Lord Hardinge or his Financial Adviser, Sir William Meyer, extracts from evidence given to the Commission on oath as to the view taken by the War Office in England of the Indian attitude. Extracts are not a satisfactory method of carrying conviction, but the subsequent publication of the volumes of evidence will show that the full correspondence conveys no better impression, and that the extracts have been taken with all the fairness possible. Furthermore, I have felt it advisable to back up the extracted evidence with a list of the measures for helping the Empire that India has adopted since the departure of Lord Hardinge and Sir Beauchamp Duff, many of them having been previously waived aside as impracticable by these same officials in written evidence before the Commission. Such a list will confirm my finding.

Although I had the advantage of being able to cross-examine Sir Beauchamp Duff and the other Anglo-Indian officials that came before the Commission, I was unable to be present when Lord Hardinge himself came under examination. My colleagues examined him on none of the passages which I extract; he may be able to give satisfactory explanations for all of them; he may deny the implication I give to them in every case. But of the meaning of plain English the public can judge, and the effect of the attitude was such that it caused the very civilians in India to complain of the pretence that "India is not at war." Explanations given now do not efface the impression conveyed then.

A. EVIDENCE AS TO THE ATTITUDE OF THE INDIAN GOVERNMENT FROM CABLES.

12. On the outbreak of war the Indian Government responded, liberally according to our then estimates of what the war was likely to be, and despatched considerable expeditions to France and to Egypt. Very soon, however, the grudging spirit made itself visible. On August 6th the loan of 15 Indian officers was refused, a small matter which was reversed two days later. Then, on August 12th, before indeed the defeats in France, the Viceroy wired—"Although we are ready to run some risk . . . The Commander-in-Chief complains that he is absolutely crippled by this last measure relating to officers."

In his next telegrams the Viceroy showed his position, safety of India must come first. August 15th—"We have, however, never wavered in our readiness to assist the Empire to the utmost of our power, limited only by considerations of the safety of India." August 27th—"We have spared no effort . . . running even a certain amount of risk by the depletion of our stock of rifles, ammunition." On August 27th he must have known of the disasters in France, but he may not have known how serious they were when he talked of "a certain amount of risk."

The appeals from home to which these telegrams were a reply have not been before the Commission, but we have a sample in Lord Kitchener's wire of September 3rd—"Can you manufacture any guns yourself;" and the reply was—"Our manufacture of guns is negligible."

No effort seems to have been made in these early times to do anything to increase the resources of the Empire in material or men. The Commander-in-Chief wired September 5th—"It was thought here politically inadvisable at present to agree to your request for Nepal troops for Egypt"; and this, though the suggestion had been made by His Majesty himself.

13. It is difficult to say whether Lord Hardinge or Sir Beauchamp Duff was primarily responsible for this attitude of negation. For instance, the Viceroy cabled, September 18th, 1914—" Although I have practically met all the demands that have been made upon me, even at some risk, there is a limit beyond which risk becomes a serious danger . . . the Commander-in-Chief will also never agree to any weakening of these frontier divisions." To which Lord Kitchener replied, September 19th- " You hardly seem to realise the seriousness of our position on the Continent . . . I cannot understand your refusal to accept the 15-pdr." This 15-pdr. gun has, of course, since been used by our troops on the Continent. The Viceroy replied, September 23rd –" Duff was so strong on the subject of the inconvenience of having two kinds of artillery in the country that I had to give way to him . . . Duff, though most willing and anxious to co-operate, is far more nervous than I am." Next day Lord Kitchener again appealed –" I do not think you yet quite realise in India what the war is going to be. If we lose it will be worse for India than any success of internal revolution or frontier attack." The Viceroy having spoken for the Commander-in-Chief, the Commander-in-Chief then spoke for the Viceroy and wired, September 25th –" A Governor-General can hardly sit quiet and see the whole control of Indian defence withdrawn from him altogether. You must remember that the Viceroy and his Council cannot be disregarded." . . . The evidence before us showed, however, that the Council was not consulted as to the war, and whenever India was asked for help she responded generously. This incident, connected not only with the question of the guns, but also with direct correspondence between the War Office and Sir Beauchamp Duff, ended as follows, the Viceroy wired, October 1st—" Duff objected strongly to Kitchener . . . and received an angry message in reply . . . We have now practically got to the bedrock."

14. It would almost seem as if jealousy for the conservation of the Army in India affected their attitude towards every attempt that Lord Kitchener might make to meet India's wishes. He offered Territorials to replace regiments of the Line, and the Viceroy replied, September 20th –" We cannot regard Territorials as fit to cope with Pathans in hill warfare. . . . We cannot raise new forces, because we have given up to the Imperial Army all our new rifles and practically all our artillery and owing to number of our officers given to meet demands in England we are already very short and with no possibility of replacing them. Of course, any idea of an expedition to Basra will be out of the question since we could not send Territorial Infantry and Artillery against the Turks." This cable was sent just at the moment that the rifle difficulty was most acute at home, but new forces were being raised here and training proceeding, with or without rifles. Two days later we are told that the Indian Government were " issuing an appeal to gentlemen in India to join the Reserve (I.A.R.) " ; they had evidently made up their minds to try to deal with the " impossibility " of replacing officers.

15. But what seems to me most symptomatic of their attitude towards any change in the established order of their world is their resentment of the Territorials. When these troops arrived, after Territorials had done good work in France against Germans, the Commander-in-Chief cabled, January 20th –" The . . . Territorials are, of course, quite unfit for frontier work " ; on January 30th, the Viceroy wired- " Second Line troops from home can hardly be regarded as suited for frontier defence " ; and on February 1st—" It would be madness to send Territorial troops to the North-West frontier." And we have seen that it was deemed " out of the question " to use them against Turks. It is not merely that their estimates of Territorial troops were mistaken, the serious point to my mind is that this estimate was one which suited a policy of obstruction. If Territorials were not fitted for frontier war, they could have learnt that as they have learnt worse forms of warfare.

16. If the Indian Government gave grudgingly and was reluctant to accept the help offered, it was also apathetic. We learn in a cable from the Viceroy, October 7th, 1914, that " Turkey . . . is not in a position to give real material assistance to the enemy." But in that matter Turkey has done more for Germany than India had done for England up to this present year. It was energy that was lacking. The Viceroy wrote on October 21st, -" I inquired of the Commander-in-Chief whether proper provision had been made for warm clothing for the troops. He told me that he was relying on private charity for this." This, of course, the Viceroy vetoed ; but that such a suggestion should have been made shows, either that the matter had been forgotten, or that the policy of starvation had run mad. On January 5th the Commander-in-Chief cabled,—" As regards reinforcements, our reservists are turning out disappointing." Yet the population of India is 315,000,000, of whom some 50,000,000 belong to fighting races. At last, on

February 5th, 1915, Lord Kitchener cabled,—" Cannot you organise the volunteer forces that you have so that they could either relieve your garrison in India or . . ." And again on February 12th,—" I should certainly take some slight risk . . . I should in addition call on European residents and Indian volunteers to enlist for general service." Yet nothing was done in this direction until this present year. The Commander-in-Chief replied on February 8th,—" I am endeavouring to organise the volunteers in India, but . . . even for service in other parts of India, few of those are willing to leave their civil posts." This objection has been felt in England also and in a measure surmounted ; in India it immobilised a force of 44,000 trained and enrolled men. We had no evidence that efforts had been made to get the volunteers to volunteer for general service.

17. Meanwhile complaints of the " denudation" of India continued. The Viceroy wrote, November 5th, 1914,—" I am receiving complaints from the provinces that they are denuded of troops, and that Europeans are anxious as to the future." We had no corroborative evidence on this point, but Englishmen, though anxious everywhere, were not the less willing to risk their lives. When the Home Government began to press for fresh units to be sent to Mesopotamia complaint grew to protest. Lord Hardinge telegraphed, February 16th, 1915,—" We are strongly of opinion that we have reached limit of risk which can justifiably be imposed on the people of India, who pay for the Indian Army." On February 25th- " We feel that we have not been treated fairly . . . It is the old story of treating India like a milch cow, and this creates such a deplorable impression here." Not only do these two telegrams show a glaring example of the " India not at War " theory, but the latter one is an unfair suggestion. The people of India knew nothing of the demands that were being made, and when demands were made on them after Lord Hardinge left, they met them with as much patriotism and as little complaining as any part of the Empire.

Nor will the people of India appreciate Lord Hardinge's cable of March 3rd– " I do not think that we ought to be asked to take further risks, and in fact we must refuse to do so . . . If the facts were generally known there would be an outcry in this country." On the same day he cabled –" India has therefore done her duty to the Empire, and it is quite impossible, in view of the situation on the frontier and in interior, to do more. It is no use to suggest to us that we should take further risks in India." To these cables Lord Crewe replied –" His Majesty's Government definitely order the strengthening of General Barrett's force at once, and that you are both entirely relieved of responsibility for consequences." It seems to me a question whether Lord Hardinge ought not to have resigned office on receipt of such an order couched in such language. The Home Government seem to me also to have a certain responsibility for retaining him in office. Lord Kitchener wired to Sir Beauchamp Duff on the same date– " I advise you as an old friend to reinforce Basra. It appears to me that the attitude adopted in India is excessively dangerous." I hold that the Commission should show that it was, in fact, dangerous.

18. Still the complaints continued. On March 9th the Viceroy wired: " I cannot spare any more troops- -an opinion in which I have the Commander-in-Chief, the whole of my Council, and all responsible people with me . . . I receive an imperative order . . . The Commander-in-Chief . . . has stated his opinion . . . that he would like to see every European woman out of the country." This protest fell on deaf ears as it deserved to do ; and on March 14th the Army Council stated its opinion to the Secretary of State, Lord Crewe –" The maintenance of British rule in India is a duty of high importance . . . but it is not a duty which can claim to be paramount over all others." On April 29th, 1915, was made the last protest, the last for many months for a reason which will appear. The Viceroy wires—" The lives of loyal British and Indian subjects are imperilled by the demands made upon our military resources."

19. General Nixon had now been sent from India to Mesopotamia with a large increase of force, and the attitude of the Indian Government changed. I cannot avoid the conclusion that the prospect of kudos to be gained by a successful expedition affected the judgment of that Government. Unfortunately it did not change their attitude towards the Home Government, but merely their ambitions. No sooner did the expedition assume a creditable size than the Indian Government, without inquiry as to its wants or altering the policy of aloofness, began almost to urge the ill-equipped force forward.

20. As early as January 20th, 1915, the Commander-in-Chief cables– " An advance to Amara . . . is required by political considerations." Their instructions in March to General Nixon, on his leaving for the Gulf, were to occupy the whole of the Basra Vilayet, which included Nasiryeh, Amara and the Tigris river nearly to Kut- -while the Home

Government were left under the impression that the General's rôle was a purely defensive one. In June, an appreciation by the Chief of the General Staff, India, urged as a reason for advance—" Now we are well equipped with River Transport, the Turks have little." No sooner was Nasiriyeh taken than the Viceroy wired, July 26th—" We consider it a matter of strategic necessity that Kut should also be occupied."

21. When the critical decision as to the advance on Bagdad was under consideration the following series of cables came from the Viceroy, 6th October, 1915—" . . . Nixon with forces at his disposal could without much difficulty capture Bagdad. . . ." October 21st, 1915—" . . . Take and occupy Bagdad. This will present no difficulty whatever." October 23rd, 1915—" I am confident that the right policy . . . is to take the risk and to occupy Bagdad . . ." If the Commander-in-Chief had thought of going himself to Mesopotamia he could have seen at once that the force was unfitted for such an expedition. If he had only kept in touch with their transport and medical requirements, if he had merely seen and spoken to the men that returned from that country, he could never have made such a mistake.

22. But the attitude towards the Home Government did not change. It almost seems to have spread throughout the Service, for we have the following amazing minute from the Military Secretary to the Commander-in-Chief addressed to the Military Secretary to the Viceroy, October 17th, 1915—" . . . It is proposed by the Chief that the force he has named should be assembled . . . for eventualities, but that the Home Government should not be informed of this . . . The Home Government are very anxious that Bagdad should be taken, and they will send us the required force if we hold out, but they will give us nothing if the least sign of willingness to find reinforcements is shown by us." The Indian Government " held out " while Serbia was being overrun, and while our last man was being put in at Loos. But to my mind the most regrettable feature is that no shame was felt, even among subordinate officers, at showing not the " least sign of willingness." As arranged, the Home Government was not informed, and the Viceroy cabled, October 17th—" . . . . In no case could I undertake to supply from India, even temporarily, a further force of the strength of a Division."

Ctesiphon produced almost the same results as peremptory orders from home; and on November 25th, the Viceroy wired—" I have agreed to Commander-in-Chief's proposal to despatch immediately two brigades of infantry and one of artillery from India. . ."

23. The incapacity to extemporise supplies from India is also a feature to which one must draw unfavourable attention. It could not have arisen from inability, since supplies are now drawn from that country. Except as regards river steamers, and that late in the day, commandeering private or public resources does not seem to have been even contemplated. That must be the conclusion from the following cables: December 15th, 1915—" The battalions should be despatched from England fully armed and equipped as we can do nothing more as regards providing material." February 2nd, 1916—" . . . Additional transport cannot be provided from India." February 5th—" . . . Ordnance, stores . . . local output is strictly limited." February 7th—" . . . A.T. carts and draught mules . . . This demand cannot be met from India." One may properly contrast with these a telegram to India from the Chief of the Imperial General Staff, February 10th—" . . . What steps are you taking to supply deficiencies and in what way can I help."

24. It would be superfluous to quote further refusals of help, but another aspect of the Indian Government attitude cannot be passed over. A desire to put all possible expenditure off their shoulders on to the British taxpayer was present and seems to me to be mean at such a time as this. This desire interfered, as the majority of my colleagues have shown, with the construction of the railway, and is illustrated by the following telegram from the Viceroy—" The expenditure (on a cable from Bushire to Fao) will be debited to the Imperial Government."

We are not building any new railways in England; indeed, we have found it necessary to pull up railways in this country in order to provide rails for France. What then can be said of an objection to a light railway in Mesopotamia raised by the Commander-in-Chief as late as April 27th, 1916—" To construct an efficient two-foot six line, railways in this country would have to be closed down, or progress on others stopped."

B. EVIDENCE AS TO THE ATTITUDE OF THE INDIAN GOVERNMENT FROM SPEECHES.

25. The evidence of the attitude of the Indian Government is as clearly shown in speeches made before the Indian Council in March, 1915, on the Budget Debate at Simla. On March 2nd Sir William Meyer stated in Council :—" In consequence of the war, expenditure is being restricted to what is considered essential for the maintenance of efficiency and the protection of this country." Lord Hardinge, in the Budget debate on March 30th said—" The imposition of additional taxation at the present time would not in our judgment have been justified either by financial requirements or by the present economic condition of the country." Mr. Bannerjee added—" Although it is a War Budget it does not add to the military expenditure ; on the contrary, the military expenditure is slightly less than had been budgeted for." Mr. Abbott, of Jhansi, offered a mild protest, he said—" Handsome as our offerings may have been, . . . they have not, I regret to say, been on the same princely footing and basis as that of our fellow Colonials. However, I am confident that the demand has only to be made and loyal India will . . . offer to pay the expenses of our Expeditionary Forces in the same way as Canada and Australia are doing." To which Sir William Meyer replied—" India had been paying heavily for a splendid Army . . . for the defence of India . . . India had been maintaining this Army long before the Dominions thought of doing anything, to speak of, in the way of military expenditure."

While the above extracts show clearly enough the attitude of the Government towards expenditure on the war, two further speeches show as clearly the attitude of the same people towards borrowing on the London market. Lord Hardinge in the same Budget debate declared :—" Our capital programme . . . *i.e.*, for railways and canals . . . . must be maintained on a scale bearing some reasonable relation to past standards if excessive hardship and dislocation are to be avoided. Our borrowing arrangements naturally follow." As late as October, 1915, Sir William Meyer, speaking in the Karachi Chamber of Commerce, explained the situation—" The lending capacities of India are very limited, and we cannot face the prospect of depriving ourselves of the aid, which we shall have to look to from them, by letting them be diverted to a War Loan."*

C. EVIDENCE SHOWING THE OPINION HELD BY RESPONSIBLE PERSONS ON THE ATTITUDE ADOPTED BY THE INDIAN GOVERNMENT.

26. It is unfortunate that Lord Kitchener could give no living testimony, but answers by Lord Crewe, General Sir Edmund Barrow and Major-General Maurice are given below :—

Lord Crewe : " From the first the Government of India kept camplaining almost bitterly of the demands that were made on them. . . He (Lord Kitchener) took precisely the same view of the denudation of British troops in India. I quite well remember his going so far as to say, on one occasion that, even if we lost India through a mutiny, it would be better than losing the fight in France."

Lord Crewe, being asked : " They treated the crisis rather as though it were an extreme form of frontier campaign than as though it were a world-wide war for which there was no precedent," replied : " Yes, I do not think that is an unfair criticism."

General Sir Edmund Barrow, being asked : " ' It is no use to suggest to us that we should take further risks in India.' Does not that indicate a rather curious spirit in connection with this European war ? Do they put India first and England second ? " replied : " Yes, it would really read so."

General Sir Edmund Barrow, being asked : " There does not seem to be any exceptional energy or initiative in India," answered : " I am inclined to agree."

General Sir Edmund Barrow, being asked if he would indicate what had caused " this breakdown of administration," replied : " Yes, but I think . . . the initial cause goes far beyond this Commission. I mean it strikes at the whole system of military administration in India."

Major-General Maurice, Director of Military Operations, being asked : " Do you think that the Indian Government have made full use of the resources of India as has been done in this country ? " replied : " My impression is, certainly not."

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* This speech of Sir William Meyer's was not put before the Commission, but came privately into my hands. Sir William Meyer was not examined by the Commission as he was in India.

Major-General Maurice, being asked : " Have you heard suggestions that General Sykes is being starved as regards officers and equipment ? " replied : " Yes ; I hope things are satisfactory now, but there is no question he was starved, and it came to our notice and we pressed the India Office very strongly."

Even the Vincent-Bingley Commission (composed as to two out of three of its members of Anglo-Indian officials) found itself compelled to put the blame on the Indian Government. In Sir Beauchamp Duff's words : " The Commission have not followed the headings of the terms of reference in their report. . . The Commission have departed from their terms of reference and embarked upon criticism of the preparations for the campaign. . . The Commission have ended by reporting on the past and present action of the Government of India instead of carrying out their instructions."

The views of the civilians in India are even more frankly stated, and to clear them of responsibility the following examination of Mr. F. Carter, of Messrs. Turner, Morrison & Co., Ltd., is given :—

I gather from your evidence that there is a sort of feeling in India among the civilians that India is not pulling its full weight during the war -that the Indian Government is not doing all that it might do during the war ? -Yes.

Can you say whether that feeling is general among the civilians in Calcutta ? -Yes.

Did it never occur to the civilian population in Calcutta that more might have been done in making ammunition at the same time that the Ministry of Munitions was started over here ?—Yes.

You never heard that the difficulty was that they could not get machinery ?—No.

Is there any basis for that suggestion, considering that there were the American and Japanese markets available ?—No.

You could have got lathes from both those countries ?—Yes. How did we start making munitions at all ?

The other reason given for not making munitions in India on a considerable scale is that the Indian native is extremely difficult to teach to work in the workshops. Is that so ?—No.

Would you consider an Indian native quite as easy to teach the use of the ordinary lathe as a woman in England ?—Far better.

It has been stated by the Commander-in-Chief that India is a poor and backward country and that therefore it cannot be expected to help more than it has done. Is that your impression of India ? -No, it is not.

Is it your impression that it is a very poor country at the present time ?—No.

You have been in India for some years. Have you ever known India more prosperous than at the present time ?—No, never.

Do you regard -I will call it the *non possumus* attitude of the Government of India, as due to the Commander-in-Chief and the Viceroy, or is it due to the whole of the bureaucracy in India ?- I should think that it is the whole of the bureaucracy in India. I am speaking of the Imperial Government and not about Bengal or Bombay.

The whole of the Simla Government ? -Yes, the Simla Government.

D. EVIDENCE AS TO THE ATTITUDE OF THE INDIAN GOVERNMENT AS SHOWN BY MEASURES ADOPTED SINCE THE CHANGE IN THE PERSONNEL OF THE ADMINISTRATION.

27. These are the measures which were not taken by Lord Hardinge, but which, I believe, have subsequently been adopted : -

A War Loan.

28. We had evidence put before us as to the poverty of India. This was denied by all the witnesses who were questioned on the subject, and I cannot but think that the statement was made to excuse the inaction in this matter of the Indian Government. A loan is now being raised, for the first time.

Sharing the War Expenses.

29. The Indian Government have now offered £100,000,000. Previously the whole expenses of the Indian Expeditionary Forces in France, Egypt, East Africa and Mesopotamia, over and above the normal peace expenditure of the Indian Army, had fallen upon Great Britain alone; and the Indian Government was content to let this be so, making no protest, no offer even to help in our need.

War Taxation.

30. Till this year there has been no raising of the Indian income-tax, no war-profit tax.

Compulsory Service for Whites and Eurasians.

31. This too has come about only since Lord Hardinge and Sir Beauchamp Duff left India, 12 months after compulsory service was enacted in England.

Combing-out of the Civilian Officials.

32. At the time of the Return put before us, probably July, 1916, only 182 civilian officials, less than 1 per cent. of the available men, had been given leave to join the Indian Army Reserve, and then only ,according to Sir Beauchamp Duff, for service in India itself. This Sir Beauchamp attributed to the India Office in this country. It may be so, and I am not clear that there has as yet been any marked change in this matter.

Mobilization of Industry.

33. We had evidence that the barge-building yards at Calcutta and Bombay were lying empty for the first year of the war. The Tata Steel Works were continuing to produce steel rails for Indian railways. It was only late in 1916 that Government control of the works of the Tata Company and the Bengal Iron and Steel Company was introduced as in Great Britain.

Restriction of Imports.

34. This seems not to have occurred to the Indian Government till this year, but they had no necessity to keep up the exchange. The series of Government demands that were, however, made on the home country without the perception that they could not possibly be carried out argues a lack of appreciation of the seriousness of war.

The raising of new Units for the Army.

35. No new units were raised till this year, although the population of India is 315,000,000, of whom about 50,000,000 come from fighting races.

Commissions for Native Officers.

36. Although they were very short of officers in the Indian regiments, executive commissions were still, as before the war, withheld from the natives of India. Indeed, even now it is not the King's commission, but the Viceroy's that is given to the native cadet in the new army. We had no evidence, however, that this omission was not the fault of the War Office at home.

Frank Co-operation with the Princes and People of India.

37. This, which would have meant so much to England and India, was not adopted. Instead even the Viceroy's Executive Council was passed over, and the Viceroy and Commander-in-Chief governed and thought alone. No generous appeal for help was made to India, no more generous attitude shown to India. On the last point I do not know that there has as yet been any change.

Supply of Shell and Stores from India.

38. This has only recently been taken seriously in hand. With America, Japan and Australia to draw on by submarine-safe routes, the steps could have been taken as well in 1915, and a safe supply to Mesopotamia by a short route would now have been available. Colonel Collins, M.P., observed, even last September, that the clothes of the coolies in Mesopotamia were marked as coming from Manchester.

CONCLUSIONS FROM THE EVIDENCE AS TO THE ATTITUDE OF THE INDIAN GOVERNMENT.

Effect of want of willingness to help.

39. I cannot resist the conclusion that the above evidence points to a want of willingness to help on the part of the Indian Government—that is on the part of Lord Hardinge and Sir Beauchamp Duff. That this unwillingness affected adversely the expedition to Mesopotamia is obvious. Had they thrown themselves heart and soul in to getting India to do all that was humanly possible both in men and material the whole course of the war might have been altered. That was not done even in this country at first, but the attitude of the Indian Government prevented the effort being made in the spring of 1915 as was done here, and it prevented the success of their own expedition in Mesopotamia.

The Defence of the Government.

40. The answer made by the Government of India to this charge is that the dangers in India were such that what might seem obstructiveness was in reality honest, if mistaken, caution. There was acutely present to their minds danger from (*a*) mutiny, (*b*) a native rising in India, (*c*) an invasion from Afghanistan or from the frontier tribes.

The Danger to India.

41. It is natural to assume that, since the attitude taken up by Lord Hardinge and the Commander-in-Chief has come under open criticism at home, every effort will have been made to colour the risks in India as darkly as possible. The Secretary of State has prepared and put before us a Memorandum detailing as fully as possible the internal troubles which India has gone through. It is difficult to summarise, and the whole cannot now be published. There have been more than the usual number of dacoities; there have been curious semi-religious theories about the Germans; Hindus have been murdered by Mohamedans; there have been rumours of gun-running plots; the police got wind of some general troop trouble, and a native post or two seem doubtfully to have thrown off their allegiance -less than a dozen men. But there has been no armed rising, and the capture of 50 revolvers by revolutionaries is singled out as the most serious incident. No mutiny has taken place in India sufficiently serious to call for disarmament or for corporate punishment of any unit. Germans were not interned in India till long after they were interned here in England, which omission testifies against any real fear of serious internal trouble. The Amir has shown great loyalty, and the seven "heavy" raids to which Sir Beauchamp Duff bore witness actually caused only 338 casualties. On July 2nd, 1915, after the period in which reluctance to help was most marked, Sir Beauchamp cabled to Lord Kitchener, "Though I have had to meet three heavy raids, the frontier has been fairly quiet." The other raids, such as they were, took place subsequently.

The Seriousness of the Risk.

42. Therefore it was not actual trouble but possible dangers to British rule in India behind which the Administration must shelter itself. Of these possible dangers both Lord Kitchener and General Sir Edmund Barrow should, from their long residence in India, be well able to judge; yet no administrators are more severe in their criticism of the attitude of the Indian Government than these two. There is always danger in this world: it is a question of degree.

The Council not consulted.

43. Had the possible dangers been of a serious character, it is to me inconceivable that the Viceroy should never have seen fit to consult his Council on the relative urgency of the demands made on the Indian Army by India and by the Home Government. Real danger in India must have entailed the consulting of the Council, more especially in March, 1915, when the peremptory order was issued from Whitehall. That they were not consulted is evidence that the danger did not then exist to the degree now put forward.

Suppression of a Modern Rebellion.

44. Danger to British rule in India from a rising of the people, or from a mutiny, has obviously become much less since the year 1857. Railways, the telegraph, the helio, wireless telegraphy, motor transport, magazine rifles, machine guns, aeroplanes, armoured cars, all these costly developments of modern warfare are beyond the reach of insurgents,

and place even a few Regular troops in a position of immeasurable superiority. Furthermore, during a great war, the power of ruthless repression—falling on the just as well as on the unjust—is little likely to be too closely scrutinised, and adds greatly to the decisive power of the Executive.

Attitude displayed in other ways.

45. In any case it does not appear that the objection to the denuding of India of troops can be an excuse for the attitude of the Indian Government displayed in other matters. Danger in India cannot account for the want of energy shown in India, for the non-mobilisation of industry, for the selfish financial attitude, for the objection to building a Tigris railway (two-foot six-inches gauge) because "progress on railways in this country (India) would have to be stopped," for the reluctance to use British Territorials, for the want of touch with their own expedition, for the ignorant advice given as regards the advance on Bagdad. Nor even can it account for the medical breakdown, since surely the actual needs of an army in the field must come before the problematic needs of an army on the frontier. It would appear that, in fact, the Army Administration in India was jealous of the Army at home; they wished to retain the magnitude of their command; they felt they were neglected, "out of the picture," and they determined, perhaps unconsciously, to be obstructive. It will be unfortunate if an attitude of this sort is passed over.

Attitude a Calamity.

46. Such an attitude is held unpatriotic in a private citizen; it is worse than unpatriotic in a British official; and in men in the positions occupied by Lord Hardinge and Sir Beauchamp Duff it has been a calamity for England.

FINDINGS.

47. I find that, throughout the tenure of office of Lord Hardinge, the Government of India showed little desire to help and some desire actually to obstruct the successful prosecution of the war.

48. I find that the responsibility for the Mesopotamian failure of 1915-16 rests principally on the Government of India, in that they gave ill-informed advice and did not throw themselves and the resources of India into the energetic conduct of the war.

49. I find that the Government of India consisted in fact of the Viceroy, Lord Hardinge of Penshurst, and the Commander-in-Chief, Sir Beauchamp Duff.

50. I find that no blame should be attributed to anyone, civil or military, in this country for the initiation, consideration or sanction of the advance to Bagdad in 1915. I am equally convinced that the delay caused by the consideration of the advance in this country did not retard or adversely affect in any way the chances of that advance.

51. I find that the advance on Bagdad failed because the transport was insufficient and the force ill-found.

52. I find that the relief of Kut failed because the transport was insufficient and the force ill-found.

53. I find that the troops maintained the best traditions of the Service, that the generalship at the front was fair, but that General Townshend alone inspired in his men that confidence and devotion without which victories such as the first battle of Kut and Ctesiphon are impossible.

RECOMMENDATIONS.

1. Steps should be taken at once to put the Indian Army under the control of the War Office in Whitehall. During the conduct of a world war it is essential that there should be unity of control. To have an army in India (or an army in Egypt) independent of the orders of the War Office must lead to inefficiency. I, and I believe all my colleagues, were impressed very much with the energy displayed by the War Office directly they took over the control of the Army in Mesopotamia, and with the rapid improvement in the efficiency of that force. The same energy applied to the Army in India might yet provide us with new units and increased material from that country with its 315,000,000 inhabitants. The objections that were raised to such control by Sir Beauchamp Duff early in the war can no longer carry weight.

2. All the evidence before us showed that the Indian Reserve system had completely broken down. The old system seems to have been quite unsound as a military expedient, and an inquiry should be initiated at once to report on the most suitable substitute, to provide reservists not only for the rank and file, but also for an efficient reserve of officers.

3. Either the inquiry suggested above or the Indian Administration itself should immediately consider whether the old-fashioned prejudice against giving the King's Commission to natives of India can not be set aside during this war. Even with the invaluable assistance given by the civilians who flocked to the Indian Army Reserve of Officers, the evidence given before us showed a lamentable shortage of officers with the Indian Regiments which must adversely affect their fighting value. There seems no reason to suppose from the Mesopotamian campaigns that Indians, as fighting men, are any less capable than Turks, who have their own officers under some German guidance. Indian officers under British guidance should do as well.

4. We had evidence that the use of the censorship in Mesopotamia did much to injure the morale of the troops. For some time after the medical breakdown no letters home were permitted except on the printed postcards, of which there were few or none available at the front. It seems clear to me that the censorship was used to prevent people at home from knowing what the troops were suffering. This is not the proper use of the censorship, and is a point that should be made clear now to all the various General Officers Commanding Expeditionary Forces.

5. While concurring in the Recommendations in Part XII, paragraphs 31 and 32 of the Majority Report (which relate to the officers of the Indian Army), I wish to record my conviction, drawn not from evidence before the Commission but from some experience of the two armies, that the system of officering the King's African Rifles in Africa is superior to the Indian system. The King's African Rifles officers are officers of British regiments who are attached to the well-paid African Rifles for a period which in the general case does not exceed five or six years, so that the officer never loses touch with his profession at home or acquires the oriental lethargy that saps the vitality of those kept too long in tropical countries.

6. The other recommendation made by the majority in which I concur is that in Part XII, paragraphs 34 and 35 (relating to medical matters). But I would urge that no re organisation of the Indian (or other) medical service can be satisfactory which leaves the filling of the senior posts to the ordinary promotion of seniority. In no branch of the service is it more important that the higher direction should be filled by selecting the men who have kept up to date. Long and stereotyped service in a peace garrison may indeed give the organising experience necessary for a campaign—though even that by no means follows—but it certainly does not enable a doctor to keep in touch with the latest discoveries of a rapidly-changing science. I recommend that a Board of Selection, recruited in large part outside Army circles, should select for all promotion above the rank of Major. The same Board might well make recommendations on sanitary, hospital and equipment matters.

7. In one of the Papers put before us by the Indian Government, in order to justify the contrast between the attitude of India and the attitude of the self-governing Dominions, they write as follows—"The self-governing Dominions deny to India the full privileges of citizenship. India again, though not of her own volition, is practically a free market for the trade of the Empire, whereas the colonies impose upon her trade . . . a heavy handicap in the shape of protective tariffs; and are at liberty, as it would be urged, to equip themselves for an increased outlay on Imperial defence by methods from which India is debarred."

My last recommendation is that we should no longer deny to Indians "the full privileges of citizenship"; but should allow them a large share in the government of their own country and in the control of that Bureaucracy which in this war, uncontrolled by public opinion, has failed to rise to British standards. Lord Kitchener said that it would be better to lose India than to lose the war. It would certainly be better to lose India than to lose that for which we are fighting the war—the glorious traditions of a people old in liberty.

(Signed) JOSIAH C. WEDGWOOD.

17.5.17.

APPENDIX I.

"VINCENT-BINGLEY" REPORT.

From

THE COMMISSION APPOINTED TO ENQUIRE INTO THE MEDICAL ARRANGEMENTS IN MESOPOTAMIA.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA, ARMY DEPARTMENT.

SIMLA.
June 29, 1916.

SIR,

In accordance with the instructions conveyed in your letter No. H.-2418, dated March 31st, 1916, we have the honour to submit the following report on the arrangements made for the collection, treatment, and removal of the sick and wounded during the recent operations in Mesopotamia. As the Government of India are aware, the Commission, which was originally composed of two members only (Sir William Vincent and Major-General Bingley), was first appointed by His Excellency the Commander-in-Chief on March 2nd, 1916, with directions to enquire into the medical arrangements in Mesopotamia during and subsequent to January, 1916, and to report the conclusions arrived at to the Chief of the General Staff.

2. On receipt of these orders the Commissioners then appointed proceeded at once to Bombay, where a number of sick and wounded who had recently come from Mesopotamia were detained in hospital. Several of the hospitals in Bombay were visited, and various witnesses were examined, many of whom, however, could not be questioned at any great length in the time available, as they were just about to sail for England in the hospital steamer "Assaye." After completing as far as possible their enquiries at Bombay, the Commissioners went to Basra and continued their investigations there. At this stage of the proceedings the terms of reference were modified so as to include in the scope of the enquiry the medical arrangements made for the campaign during the last four months of 1915. From Basra the Commissioners proceeded to Amara, 135 miles up the Tigris. There they recorded the statements of various witnesses, and inspected the arrangements made for the reception and accommodation of the wounded at the different hospitals. After finishing their investigations at Amara, they travelled by river steamer up the Tigris to Wadi, about 270 miles from Basra, where the headquarters of the Tigris Force were encamped. Here fresh evidence was recorded, the arrangements for accommodating sick and wounded were further investigated, and the Commissioners had an opportunity of testing, by personal observation, how far the arrangements for the evacuation of the wounded from the battlefield to the field ambulances and hospitals at Wadi were satisfactory. From Wadi the Commissioners returned to Basra, where revised instructions were received from the Government of India. A copy of the letter and of the enclosure containing these instructions is annexed to this report. These instructions made the following important changes in the terms of reference :—

(*a*) Mr. E. A. Ridsdale was appointed a member of the Commission.

(*b*) The Commission was directed to report the result of its enquiry to the Government of India.

(*c*) The scope of the enquiry was extended, so as to include the whole of the operations in Mesopotamia from November, 1914, up to date.

(*d*) The Commission was directed not only to enquire into the adequacy of the medical arrangements, but was instructed to ascertain and assign responsibility for any defects found and to state whether individuals or the system were to blame.

The addition of a new member at this stage placed the Commission in a difficult position, as by this time Sir William Vincent and Major-General Bingley had examined more than 130 witnesses and had completed their investigations up the Tigris. The inclusion of the earlier operations in the scope of the enquiry added a further complication. The enquiries hitherto made had been confined to operations subsequent to September, 1915, although many of the witnesses examined could have given evidence of value on previous phases of the campaign. By this time, moreover, two of the Commissioners had realised the difficulty of obtaining definite and accurate evidence on the detailed points referred to them, in respect of the operations of September, October, and November, 1915, as many of those intimately connected with this portion of the campaign were either besieged in Kut-el-Amara, or had left the country. The difficulty of securing such evidence in regard to still earlier operations was even greater, and it was clear that it would not be possible in many cases to ascertain all the details required by the reference, such for instance as the forecast of preparations considered necessary prior to each action. For these reasons, we asked that the terms of reference might be amended so as to require us to report on actions prior to Ctesiphon in general terms. This request was refused. We wish, therefore, to state that in dealing with the multiplicity of detail apparent in the report, we are necessarily dependent upon the memory of the witnesses for the accuracy of particular statements. A more serious complication arising from this amendment relates to a question of principle, in that it involved the examination of the medical arrangements of the whole expedition. The medical organisation of a force is an integral part of its military organisation, and cannot be considered apart from the latter. We have, therefore, at times found it impossible to examine the working of the medical organisation without at the same time criticising other arrangements which, though not under the control of the medical authorities, indirectly affected the well-being of the sick and wounded. We have endeavoured to avoid this as much as possible, but we have, throughout our enquiries, realised the difficulty of carrying out any comprehensive investigation of medical arrangements as apart from the general military organisation. It is true that any enquiry into the medical arrangements of the winter of 1915–16 would not have been entirely free from this difficulty, but except as regards transport, the causes which led to the breakdown at that period were largely of a temporary and local character, being due to unforeseen circumstances rather than to radical defects in organisation.

3. On receipt of these instructions the necessity of a second tour up the Tigris was carefully considered, and after discussion it was decided that Mr. Ridsdale should proceed to Amara to see the state of affairs there for himself and to collect further evidence, and that the other two members of the Commission should go up the Euphrates to Nasariyeh and continue their enquiries there. In pursuance of this decision, Mr. Ridsdale proceeded to Amara on May 5th, and Sir William Vincent and Major-General Bingley went to Nasariyeh. The

latter two members of the Commission returned to Basra on May 9th, visiting the hospital at Kurna *en route*. On May 13th Mr. Ridsdale rejoined the Commission, and after a short stay at Basra, in order to collect certain statistical information, we proceeded to Bombay, where we arrived on May 22nd. On May 26th we left for Simla, where we completed our investigations. In order to secure the fullest possible information on the points referred to us for enquiry, we have not only examined a large number of witnesses orally, but have endeavoured by personal inspection and enquiry to ascertain the actual state of affairs and to see for ourselves how far the medical arrangements now work satisfactorily. We have visited numerous hospitals and discussed various points with administrative and executive officers. Two of the Commissioners have personally witnessed the evacuation of the wounded from the battlefield, and scrutinised the arrangements made for their reception and accommodation at dressing stations, collecting stations and field ambulances, and all have travelled with convoys of sick and wounded down the Tigris. Further, we have invited many persons, in a position to give evidence of value, to submit written statements of their experiences and opinions, and by the courtesy of Lieut.-General Sir Percy Lake a notice was published in Force Orders inviting anyone who so desired to furnish a statement to the Commission. The 266 statements recorded in the appendix represent the results of our labours.

4. In spite of these efforts, however, we feel that we have laboured under great disadvantage in our enquiry, particularly in respect of the extended scope of our investigation. In the first place, many officers whose testimony would have been of great value notably Major-General Townshend, Colonel Hehir, I.M.S., Assistant Director of Medical Services, and other officers of the Sixth Division—were, when the enquiry was being made, either besieged in Kut or prisoners of war. We are therefore at an obvious disadvantage in having to criticise their administration without affording them an opportunity of putting forward their views. Many officers intimately connected with particular phases of the campaign had left Mesopotamia before the Commission was appointed, and, being separated from official records, have not been able to give detailed information on particular points to the Commission. In the case of many other important witnesses we have had to be content with written statements, although it is probable that by personal examination detailed information, on various points not referred to in these statements, could have been elicited. Finally, many of the witnesses examined were officers who, when the Commission was conducting its enquiry, were so overwhelmed with current official work that it was impossible for them to collect and furnish detailed statistical information on particular points without real detriment to their public duties. It was manifestly undesirable to ask them during the active prosecution of the campaign to give up much of their time to collect such information. We also much regret that owing to Surgeon-General J. G. MacNeece having left India on sick leave, before our return from Mesopotamia, we were unable to examine him.

5. *Military synopsis.*—As we are required to record our opinions as to the sufficiency of the medical arrangements in Mesopotamia during each phase of the campaign up to the fall of Kut-el-Amara, and as we are directed to bear in mind throughout our proceedings the strategical situation during this period, and the tactical obligations arising therefrom, it seems desirable to preface our criticisms by a short historical *résumé*, so that the sequence of events may be followed and due importance paid to the military considerations involved. For facility of reference a sketch map is added, showing the position of places mentioned in the text.

The campaign in Mesopotamia up to the time of the departure of the Commission may be divided into four phases, viz.:—

I. The landing at Fao, the occupation of Basra and Kurna, and the defeat at Shaiba or Barjasiyah of the Turkish attempt to recapture Basra.

II. The expulsion of the Turks from Persian Arabistan followed by the occupation of Amara on the Tigris, and of Nasariyeh on the Euphrates.

[For convenience the later operations near Nasariyeh have been included in this phase.]

III. The capture of Kut-el-Amara, advance to Ctesiphon, and subsequent retreat to Kut.

IV. The defence of Kut-el-Amara and the unsuccessful attempts to relieve it.

PHASE I.

6. *Landing at Fao. Battle of Sahil. Capture of Basra.*—War was declared on Turkey on October 31st, 1914. Meanwhile preparations had been made for the occupation of Abadan and the protection of the Persian oil-fields by the organisation of a small force under Brigadier-General W. S. Delamain, for service at the head of the Persian Gulf. This force, consisting of the 16th Infantry Brigade with two Indian mountain batteries, was sent to the mouth of the Shatt-el-Arab and directed to effect a landing near Fao. This was carried out on November 6th practically without opposition. The main disembarkation took place at Saniyah, opposite Abadan, on November 10th, and on the 15th General Delamain dispersed the Turkish advanced troops at Saihan. On November 16th Lieut.-General Sir Arthur Barrett, the Commander of the 6th Division, who had landed with the 17th Infantry Brigade two days before, defeated the Turks at Sahil or Zain, inflicting heavy losses. As the result of these operations Basra was occupied on November 23rd, its garrison having meanwhile retired to Kurna. Our casualties in these successful engagements amounted to about 800, of which some 500 occurred at Sahil.

Occupation of Kurna.—By the end of November the 18th Infantry Brigade and the remainder of the divisional troops had arrived at Basra, thus completing the concentration of the 6th Division which constituted the Expeditionary Force. Preparations were at once made for an advance on Kurna, 40 miles up the Tigris, which, being at the junction of the Tigris with the Euphrates, is a place of considerable strategic importance. Kurna was captured on December 8th by a force under Major-General C. I. Fry, with the assistance of a naval flotilla. Our losses amounted to 27 killed and 192 wounded. The Turkish Commander, Subhi Bey, late Vali of Basra, surrendered with most of the garrison. The Turks then established themselves near Rotah, six miles above Kurna, with a view to opposing any further advance.

7 *Operations round Ahwaz.*—At this time the Turkish forces were disposed in three areas, viz., on the Euphrates, on the Tigris, and on the Karun. A jehad was preached in Arabistan early in 1915, and a great gathering of Arabs, supported by eight battalions of Turkish regulars with some guns, invaded Persian territory and cut the pipe line leading from the oil-fields on the Karun to Abadan. A couple of Indian battalions with guns were despatched from Basra under Brigadier-General Robinson to protect Ahwaz and support the Sheikh of Mohammerah, whose tribesmen were giving trouble. On March 3rd this small force moved out a few miles to meet the enemy, who was encountered in greatly superior numbers. A retirement to Ahwaz was ordered, and our troops, being closely pressed by swarms of hostile Arabs, suffered somewhat severely. In consequence of this reverse, the 12th Infantry Brigade under Major-General K. S. Davison was sent to Ahwaz a few days later with orders to hold the place and keep the enemy in check until a sufficient force could be spared to expel the Turk and their Arab auxiliaries from Persian Arabistan.

8. Meanwhile it became evident that operations would have to be undertaken on the Euphrates, as well as on the Karun and the Tigris, necessitating the employment of a larger force. It was accordingly decided to reinforce the 6th Division by the 6th Cavalry Brigade and the 12th Division, the latter consisting of the 12th, 30th and 33rd Infantry Brigades, together with a Heavy Artillery Brigade and various special units. The force in Mesopotamia was then organized as an Army Corps, the command of which was given to General Sir John Nixon.

9. General Nixon landed at Basra with the Army Corps Staff on April 9th, 1915, and took over command of the force from Lieut.-General Sir Arthur Barrett, who then proceeded to India on sick leave. Certain other changes were made about this time. The command of the 6th Division was given to Major-General C. V. F. Townshend, and that of the 12th Division to Major-

General G. F. Gorringe. Major-General K. S. Davison was replaced in command of the 12th Infantry Brigade by Brigadier-General K. E. Lean, and was appointed Inspector-General of Communications. A Commandant was also appointed for the Base at Basra, where work had considerably increased owing to the arrival of additional troops. Responsibility for the medical arrangements of the force, which had hitherto been vested in Colonel P. Hehir, I.M.S., Assistant Director of Medical Services, 6th Division, devolved on Surgeon-General H. G. Hathaway, Deputy-Director of Medical Services of the Army Corps, who, as in the case of other Heads of Administrative Services, was placed in the organization orders of the force, under Headquarters, Line of Communications.

10. *Battle of Shaiba or Barjasiyah.*—It was known some time before this that the main force of the enemy was concentrating at Nasariyeh on the Euphrates, with a view to an advance on Basra. A cavalry skirmish took place on March 16th, and on April 12th the Turks under Sulaiman Askari Bey attacked our position near Shaiba and were repulsed. The British force consisted of the 6th Cavalry Brigade and the 16th and 17th Infantry Brigades with the divisional troops of the 6th Division, the whole under the command of Major-General Fry. On the following day the headquarters and one battalion of the 30th Infantry Brigade arrived at Shaiba under Major-General C. J. Melliss, and the latter as senior officer took over command. The enemy renewed his attacks, but was repulsed by a successful counterstroke. On April 14th our troops assumed the offensive, and after much hard fighting drove the Turks out of their position near Barjasiyah with a loss estimated at 6,000. Our cavalry followed up their retreat as far as Nakhailah, and the enemy fled to Khamisiyah, nearly 90 miles away, harassed in their flight by the Arabs, their former allies. Our losses in these brilliant and decisive operations amounted to 194 killed and 1,132 wounded.

PHASE II.

11. The security of the base at Basra having been assured by our victory at Barjasiyah, it was decided to despatch the 6th Cavalry Brigade and the 12th Division under Major-General Gorringe to Ahwaz, which was blockaded by eight battalions of Turks with eight guns, supported by 10,000 hostile Arabs, under the command of Mahomed Daghestani Pasha. The latter's object was to get between Basra and the mouth of the Shatt-el-Arab while threatening our communications with Ahwaz via the Karun River.

12. *Operations in Arabistan.*—Major-General Gorringe arrived at Ahwaz with the leading troops of his force on April 24th, and the Turks at once retreated to the Kharkeh River. General Gorringe followed in pursuit and crossed the Kharkeh River on May 7th, whereupon the Turks retreated towards Amara. He then turned his attention to the Bani Taruf, a recalcitrant and warlike Arab tribe which had identified itself strongly with the Turkish cause. Their stronghold at Khafajiyah was destroyed and the tribesmen defeated and dispersed. The operations of General Gorringe's force terminated with a series of demonstrations made with a portion of his troops from Bisaitin against the Turkish force which lay between him and Amara. They had the desired effect, which was to prevent reinforcements from joining the Turkish forces on the Tigris in time to oppose General Townshend's division, then about to advance from Kurna on Amara. By June 30th the task allotted to General Gorringe had been successfully completed. The operations covered a period of seven weeks, and were carried out in very hot weather under difficulties entailing severe exertions on the part of the troops. Casualties in action only amounted to 43, but there was much sickness, sunstroke and dysentery being the prevailing complaints.

13. While General Gorringe was clearing the Turks and their Arab auxiliaries out of Arabistan, Major-General Townshend and the 6th Division were preparing to move up the Tigris to Amara. No advance could be made until the end of May as all available river craft were employed on the Karun. Owing to the flooded state of the country no movements of troops were possible except afloat. This entailed the provision of *bellums** for the infantry and the preparation of specially constructed rafts for guns and ambulances.

14. *Action near Kurna and occupation of Amara.*—On May 31st Major-General Townshend attacked the enemy's positions, which consisted of two fortified localities, standing like islands on the face of the waters, from two to five miles north of Kurna. Supported by the fire of a naval flotilla and of guns mounted on barges, the operations were highly successful. The enemy's positions were captured with only 25 casualties, and the Turks retreated up the Tigris in steamers and *mahailas*,† pursued by our naval flotilla. General Townshend and the leading troops of the 6th Division reached Amara on June 3rd and occupied the town without opposition. The captures resulting from these operations included 17 guns, 1,773 prisoners, 4 river steamers, exclusive of 2 sunk, besides a number of lighters. The weather throughout these operations was intensely hot and caused considerable sickness.

15. As soon as the Karun operations were completed and Amara captured, instructions were issued for an advance up the Euphrates. The objective of the force, which consisted of the 12th Division under Major-General Gorringe, was Nasariyeh, some 85 miles from Kurna. The actions round Shaiba in April had shown that the possession of Nasariyeh by the Turks constituted a permanent menace to Basra.† Apart from this, Nasariyeh was the centre from which political influence could best be exercised over the powerful Arab tribes of the Euphrates plain. Moreover, it was a place of considerable strategic importance, as it commanded the southern exit of the Shatt-el-Hai, one of the few existing lines of communication between the Tigris and Euphrates.

16. The approach to Nasariyeh from Kurna is via the old course of the Euphrates and the Hammar Lake to Hakika, where a channel known as the Gurmah Safha gives access to the main stream of the Euphrates, some 25 miles below Nasariyeh. At the time of General Gorringe's advance the Hammar Lake could be navigated by steamers drawing 5 feet as far as Hakika. By the end of July the depth of water in the lake had fallen to 3 feet and only small stern-wheelers could be used. After July all steamer navigation stopped, and troops and stores had to be poled across the lake in *bellums*, which in places had to be dragged through the mud. It will be understood from this how great were the difficulties which General Gorringe had to overcome, especially in regard to the evacuation of the sick and wounded during the low-water season.

17. *Action at Gurmah Safha.*—By July 4th the vessels of the naval flotilla and the troops had been passed over an obstruction made by the Turks near Hakika, and collected at a point about 2½ miles below the junction of the Gurmah Safha with the Euphrates. On July 5th an attack was made on the enemy's advanced position, which was on both banks of the Euphrates, commanding the Gurmah Safha channel. The position was carried by the 30th Infantry Brigade under Major-General Melliss soon after mid-day. Our captures included 4 guns and 132 prisoners at a cost to us of 26 killed and 85 wounded.

18. *Battle of Nasariyeh.*—The Turks were now found to have taken up a series of positions astride the Euphrates about 5 miles below Nasariyeh, with both flanks resting on marshes. General Gorringe accordingly moved up to Asani, some two miles below the enemy's advanced defences and occupied entrenchments on both banks. An unsuccessful attack on the Turkish position was made on the night of July 13th. The next 10 days were spent by General Gorringe in perfecting arrangements for a decisive assault. This was delivered at 5 a.m. on July 24th, the 12th Infantry Brigade being on the left bank and the 30th Infantry Brigade on the right. By noon the enemy's main position was captured, some

* The term *bellum* is used to describe the small rowing boats used on the Shatt-el-Arab. On the Euphrates the term includes sailing boats carrying an average load of 20 tons.

† The term *mahaila* is used to describe the big sailing boats used on the Tigris, carrying an average road of 30 tons.

500 of the enemy being killed in their trenches. The Sadanawiyah position, which constituted the enemy's last line of defence, was captured in the afternoon, and by 6.30 p.m. the Turks were in full retreat across the marshes. Nasariyeh was occupied without opposition on the 25th. Our losses in these skilfully planned and brilliantly executed operations amounted to 104 killed and 429 wounded. Our captures consisted of over 1,000 prisoners and 17 guns.

19. No further operations took place in the neighbourhood of Nasariyeh until January 7th, 1916, when a mixed force under Major-General Gorringe moved out 12 miles north-west to Butaniyah, for the purpose of demonstrating towards Shattra. It was hoped that the Turks might be induced to weaken their force opposing General Aylmer on the Tigris by detaching troops to guard the lines of approach along the Shatt-el-Hai. Although this demonstration failed to accomplish this, it succeeded in attracting large numbers of hostile Arabs who might otherwise have joined the Turkish forces round Kut.

20. *Minor operations round Nasariyeh.*—The fighting round Nasariyeh at this time included three minor actions. The first was an attack made on January 14th on a small force by some 3,000 Arabs, between Butaniyah and Suwaij, while General Gorringe was carrying out a personal reconnaissance. It took the form of a rear-guard action in which our troops fell back with great steadiness to their camp. The Arab casualties numbered close on 200, our own amounting to 4 killed and 36 wounded and missing. The next action took place on February 7th, during the withdrawal of the force from Butaniyah to Nasariyeh. Our troops, under the command of Brigadier-General E. C. Tidswell, were attacked by some 5,000 Arabs. As the column fell back, the enemy was reinforced by other Arabs from the villages along the line of retirement with the result that it was attacked in flank as well as in rear. The enemy's losses were heavy and amounted to about 1,000. Our casualties numbered 373, of whom 148 were killed. To punish certain Arabs who had previously been friendly, but who had treacherously turned on our troops during their retirement, a column was sent out by Brigadier-General H. T. Brooking before dawn on February 9th to surprise, attack and destroy their villages. This was carried out very successfully and with trifling losses.

PHASE III.

21. While General Gorringe was driving the enemy away from Nasariyeh, Turkish forces were concentrating under Nur-ud-din Pasha at Kut-el-Amara, a place of great strategic importance. This place accordingly became our principal objective.

22. Owing to shortage of river steamers and the difficulties of navigation during the low-water season, the transfer from the Euphrates of the troops and guns which were required on the Tigris, proved a slow process. The concentration of the force which consisted of the 6th Cavalry Brigade and the 6th Division reinforced by various units, the whole under the command of Major-General Townshend, was not completed until September 12th when it moved forward by march route from Ali-el-Gharbi along the river bank, accompanied by its shipping. Sannaiyat was reached on the 15th and there a halt was made until the 25th. Intense heat prevailed with a temperature varying from 110 to 116 degrees in the shade.

23. *Battle of Es Sinn or Kut-el-Amara.* Nur-ud-din Pasha's army was found to be occupying an entrenched position astride the Tigris at Es Sinn, some 8 miles from where our troops were then encamped. The position was some 12 miles in extent and consisted of skilfully concealed entrenchments commanding ground which was absolutely flat and devoid of cover. General Townshend decided to turn the enemy's left and so threaten his line of retreat to Baghdad. At the same time, in order to deceive Nur-ud-din Pasha as to the direction of the real attack, preparations were made with the object of giving the impression that the principal attack would be on the right bank against the southern portion of the enemy's position. This ruse proved completely successful. The 16th and 17th Infantry Brigades, under Brigadier-General Delamain, made a night march round the Turkish left flank, while the 18th Infantry Brigade, under Major-General Fry, held the enemy in front. By 2 p.m. on September 28th the greater portion of the enemy's northern defences were in our hands, and the remainder were evacuated by him during the night. A pursuit was organised on the 29th, and the cavalry came into touch with the Turks on October 1st, but had to wait for the support of the infantry which was coming up in steamers, and the progress of the latter was unfortunately delayed by difficulties of navigation. It was not till the 5th that the column reached Azizieh, and by then the enemy had retired into his defensive position at Ctesiphon where he was reinforced.

24. The Turks lost some 4,000 men in this battle, of whom 1,153 fell into our hands. They also lost 14 guns. Our casualties amounted to 94 killed and 1,113 wounded. The battle of Kut-el-Amara, or Es Sinn, as it is sometimes called, secured for us the whole of the Basra *vilayat*. It was the crowning point of an almost unbroken record of successes. The strength of the enemy's defences, the improved quality of his troops and the inconvenience caused by shortage of land and river transport had, by this time, become very apparent. Difficulties in regard to the collection and evacuation of the wounded owing to a higher percentage of losses, the inadequacy of the medical services, and the growing length of the line of communication had also come prominently to notice, thus foreshadowing the greater difficulties which were to be experienced in later battles.

25. The next six weeks, which were utilised by the Turks in bringing down additional troops from Mosul, were spent by General Townshend in bringing up supplies, transport and reinforcements from Basra, preparatory to a further advance as soon as orders on the subject were received. These preliminary measures were again delayed by the shortage of steamers and the difficulty of navigation during the low-water season. The advance was recommenced on November 19th, and by the 21st the force, with its shipping, was concentrated on the left bank of the Tigris at Laj. A reconnaissance of the enemy's position showed that his defences lay astride the Tigris covering the approaches to Baghdad which is situated some 18 miles to the north-west. They had been under construction for some months, and consisted of an extensive system of entrenchments forming two main positions. Close to the Tigris on the left bank and midway between the two defensive lines which were about two miles apart, was the Arch of Ctesiphon—a prominent landmark frequently referred to in the statements of witnesses.

26. *Battle of Ctesiphon.*—General Townshend, after a night march from Laj, attacked the Turkish position on the morning of the 22nd at its centre and on its north-east flank. His objective at the centre was a large redoubt referred to by witnesses and described in operation orders as the "V. P.," *i.e.*, "the Vital Point." There was severe fighting throughout the day resulting in the capture of the first position and more than 1,300 prisoners. Our troops then penetrated to the second position, capturing 8 guns, and established themselves in the enemy's trenches. Here they were subjected to heavy counter-attacks by fresh troops. Shortly before nightfall it was found necessary, owing to diminished numbers, to order the withdrawal of our troop to the first position which they had captured earlier in the day. November 23rd was spent in reorganising the force and in collecting the wounded. Owing to heavy losses, General Townshend deemed it inadvisable to renew the offensive. The Turks made heavy attacks all along the line during the night, but were everywhere repulsed. On the 24th and 25th the wounded and prisoners were evacuated to Laj where steamers were waiting to receive them, and General Townshend, under cover of an offensive movement, then shortened his line so as to bring his flank nearer the river. The enemy received numerous reinforcements on the 25th and on the afternoon of that day large columns were seen moving inland as if to turn the British right flank, while hostile cavalry threatened its rear.

27. Finding himself faced by superior forces and short of supplies, General Townshend withdrew to Laj under cover of darkness and remained there during the 26th. Laj, however, did not lend itself to defence, so he fell back during the night of the 27th to Azizieh. On the morning of the 30th, continuing his retirement, he halted at Umm-al-Tubal, where he had to remain, as several of his steamers were aground. The Turks attacked in great

strength at daylight on December 1st. A fierce fight ensued in which they lost heavily. Taking advantage of a successful counter-attack made by the Cavalry Brigade, General Townshend broke off the fight and retired. Shadi was reached on the night of December 1st after a march of 30 miles, and on the morning of the 3rd the 6th Division, greatly exhausted, reached Kut-el-Amara. General Townshend then decided, with Sir John Nixon's approval, to defend the place until its relief could be effected by the reinforcements which were known to be *en route* from oversea. Defences were improved, the sick and wounded were evacuated, and some 1,300 prisoners, who had been brought away from Ctesiphon, were despatched to Basra. On December 6th the 6th Cavalry Brigade left Kut and marched to Ali-el-Gharbi. By December 7th the Turks had closed round the defences, and the investment of Kut was complete.

28. Our losses in the battle of Ctesiphon and in subsequent operations up to the investment of Kut amounted to 692 killed and 3,852 wounded. The evacuation of the wounded from these actions was delayed by the attacks of Arabs on the line of communication below Kut-el-Amara, which compelled the steamers to turn back more than once. These attacks also held up Sir John Nixon and his staff, who were *en route* from Ctesiphon to Basra, and, pending the arrival of the troops sent to their assistance, the escort, soldier clerks, batmen and orderlies on the headquarters steamer, commanded by Major-General Kemball, had to be landed in order to repel these marauders.

PHASE IV

29. The 6th Cavalry Brigade at Ali-el-Gharbi was at once reinforced by the 28th Infantry Brigade and some guns from Basra. Behind this covering detachment it was decided to organise for the relief of Kut a force composed of two divisions from overseas, designated the Tigris Corps, the command of which was entrusted to Lieut.-General Sir Fenton Aylmer. The Corps consisted of the 6th Cavalry Brigade, the 3rd Division under Major-General H. D'U. Keary, and the 7th Division under Major-General Sir George Younghusband, with corps and divisional troops.

30. General Aylmer informed Sir John Nixon on December 15th, 1915, that in his judgment it would be hazardous to rely on General Townshend's holding out beyond January 15th, and that it was therefore advisable to relieve Kut by January 10th. He accordingly recommended that the troops then concentrating at Ali-el-Gharbi should move about January 3rd. Sir John Nixon concurred, and on December 27th gave definite orders for the advance to commence on that date.

31. On January 4th, 1916, General Aylmer's leading troops under General Younghusband advanced towards Sheikh Saad, moving by both banks of the Tigris. The instructions given him were to hold the enemy to his position with sufficient vigour to make him show his hand, pending the arrival of the remainder of the Corps under General Aylmer himself. General Younghusband's column got in touch with the enemy on the morning of January 6th. The Turks were entrenched astride the Tigris some 4 or 5 miles east of Sheikh Saad. General Younghusband's plan was to hold the enemy's left and to attack and turn his right. This plan did not succeed, owing to the presence of hostile cavalry and the superior forces of the enemy on this flank.

32. *Battle of Sheikh Saad.*—General Aylmer arrived on the morning of January 7th with the rest of the Corps and ordered a general attack. Major-General Younghusband directed operations on the left bank and Major General Kemball on the right. Heavy fighting took place throughout the day, and by evening the enemy's trenches on the right bank had been captured together with 2 guns and some 600 prisoners. On the left bank, where our main attack was intended to develop, our troops were unable to make any progress. They had to entrench opposite to the Turks, who held tenaciously to their positions. All attempts to turn their left flank failed, owing to counter attacks and enveloping movements from the north. On the following day the troops were very fatigued and little progress was made. On January 9th the Turks abandoned their position and retired upstream. The pursuit proved very arduous owing to heavy rain throughout the day, which made the sodden and boggy ground difficult to march over. The losses of the enemy were estimated to be about 4,500, and our own casualties amounted to 4,262. Our losses in British officers were especially heavy, amounting to no less than 133. The exhaustion of the troops made it difficult to follow up the enemy, so for the next few days the force halted, while the Turks withdrew to the Wadi position, some 7 or 8 miles further up river from Sheikh Saad.

33. *Battle of the Wadi.*—On the 12th General Aylmer concentrated his whole force on the left bank, and on the 13th attacked the Wadi position. His plan was to turn this position by a wide outflanking movement to the north. This was to be carried out by General Younghusband with the 6th Cavalry Brigade and the 19th, 21st and 35th Infantry Brigades, supported by field artillery, while Major-General Kemball with the 28th Infantry Brigade, supported by the heavy artillery of the Corps, was to hold the enemy to his front. The 9th Brigade was to remain in reserve at Sheikh Saad.

General Younghusband's force moved into position by a night march on the 12th-13th, and then advanced in a south-westerly direction towards Umm-el-Hannah, between the Suwaikieh marsh and the Tigris, with a view to cutting off the enemy's retreat. This movement was, however, checked by hostile troops occupying trenches facing north, and as our troops endeavoured to outflank the enemy they were in turn outflanked themselves. Before long, therefore, General Younghusband was held up on an east and west line to the rear of the enemy's main positions. Meanwhile General Kemball attacked on the Wadi itself. His troops came under a most destructive rifle and machine gun fire at close range, which soon brought his advance to a standstill. During the night of the 13th-14th the enemy evacuated the Wadi position and retired into the Umm-el-Hannah defile, some 3 miles further west, where a strong defensive position, stretching along a front of 1,300 yards from the Tigris to the Suwaikieh marsh, had been in preparation for some time.

34. On January 14th the 6th Cavalry Brigade and the 7th Division, under General Younghusband, worked forward to a position from which they could observe the enemy's defences. The exhaustion of a considerable portion of the force and the necessity for evacuating the wounded precluded the idea of any immediate advance. So the day was spent in consolidating positions and in bringing the wounded down to the river bank. The latter operation was greatly impeded by heavy rain which made the ground slippery and difficult to traverse. The losses of the enemy in this action were not as heavy as our own, as they were well sheltered in trenches throughout the day, and retired in good order after dark. Our own casualties amounted to 1,601, including 40 British officers.

35. On January 19th Sir John Nixon had to relinquish command of the Force owing to ill-health, and was replaced by Sir Percy Lake.

36. *Unsuccessful attack on the Umm-el-Hannah position.*—The weather now became extraordinarily bad. Heavy rain caused the river to come down in flood, overflowing its banks in places and converting the ground on either bank into a veritable bog. The Wadi stream came down in spate, and boisterous winds greatly interfered with the construction of a bridge across the Tigris. In spite of these unfavourable conditions, the 19th and 35th Infantry Brigades advanced towards the Umm-el-Hannah defile and entrenched themselves facing the enemy. At the same time troops were ferried over gradually to Orah on the right bank, where they came under the orders of Major-General Keary, commanding the 3rd Division, part of which had arrived at the front. The object of this move was to establish our artillery in positions from which they could enfilade the enemy's trenches, as without such artillery co-operation the capture of the enemy's position presented extraordinary difficulties. By the morning of the 20th we had 14 guns in their emplacements ready to bombard the Turkish trenches. On the 16th, 17th and 18th weather conditions grew from bad to worse, and the men suffered great hardships from cold and exposure. On the nights of the 18th-19th and 20th-21st the 7th Division again moved forward and entrenched within 500 to 600 yards of the enemy's

line, while 30 guns were placed in positions suitable for a bombardment by direct fire. The 20th was devoted to a systematic shelling of the Turkish position from both banks of the Tigris, and during the night of the 20th-21st the infantry of the 7th Division pushed forward their advanced lines preparatory to the assault. By 6 a.m. all was ready for the attack, which was to be directed against the enemy's right, under cover of an intensive artillery bombardment. The main attack rushed the Turkish trenches near the river, and about 100 men got into them and held them for over an hour. Troops were moved forward to their support under heavy fire, but they drifted too far to the right, with the result that they failed to give the impetus required on the left, where their assistance was urgently needed. Profiting by this, the Turks made a vigorous local counter-attack, and our troops, overwhelmed by superior numbers, were forced back and compelled to vacate the trenches which they had captured. Orders were at once issued for a second assault. Meanwhile it had begun to rain, and it continued to do so without intermission until the next day. After another artillery bombardment the attack was renewed at 2 p.m.; but the heavy rain had made the ground difficult to move over, advances by rushes were impossible, the ground to be traversed was destitute of cover, and the enemy's fire was heavy and well directed. Thus, though every effort was made to press forward, not an inch of ground could be gained.

37. The weather conditions rapidly became worse, the ground being converted into a sea of mud over which progress was almost impossible. The troops could do no more than maintain themselves where they were until dark, when they were withdrawn to the trenches they had previously held. As far as possible all the wounded lying between our forward position and that in rear were brought in during the withdrawal. Some, however, were overlooked, and others could not be got at owing to their proximity to the enemy's trenches. Arrangements were accordingly made on the 22nd for a six hours' armistice in order to bring in the dead and remove any wounded who might have been left out. It was found that few but dead remained, as all the wounded who had fallen close to the enemy's trenches had been removed by the Turks. Any idea of an immediate offensive was prohibited by the need for giving the troops a rest after the heavy losses they had suffered. The enemy's casualties were estimated at 2,000. Our own amounted to 2,741, including 78 British officers.

38. The breakdown in the medical arrangements which undoubtedly occurred after these three battles would have been obviated to a great extent if the attempt to relieve Kut-el-Amara had been postponed until the arrival of the field ambulances and clearing hospitals of the 3rd and 7th Divisions from France. As it happened, the supposed necessity of relieving General Townshend's garrison by January 15th demanded an advance not later than January 4th, and the field ambulances of the Tigris Corps had accordingly to be improvised from any sources available at the time. As explained further on in this report, the arrangements made proved totally inadequate and led to the serious breakdown referred to.

39. When General Townshend decided, with Sir John Nixon's approval, to defend Kut-el-Amara, he did so on the understanding that he would be relieved within a month or six weeks, as he had only supplies with him for that period. Kut was completely invested on December 7th, so January 15th represented approximately the date up to which his supplies would last if issues were continued on the normal scale. Sir John Nixon and General Aylmer were thus, in our opinion, fully justified in assuming that it would be hazardous to rely on General Townshend's holding out beyond that date. Apart, however, from the question of supplies, General Townshend sent message after message urging the necessity for his early relief. Shortage of rifle ammunition, deficiencies in artillery ammunition, heavy losses, the reinforcement of the enemy, the falling-off in moral of some of his troops, and doubts as to the ability of the garrison to withstand a determined assault by superior numbers, were all urged by him as reason for the advance of the relief force at the earliest possible date.

40. On January 22nd General Townshend informed General Aylmer that by putting his troops on half rations he could last out for 27 days, *i.e.*, up to February 18th. Three days later he intimated that by utilising additional supplies found in Kut, and by killing his horses and mules, he could hold out for another 84 days. He was then asked on February 3rd by Sir Percy Lake whether it would be correct to assume that he had sufficient supplies to feed his garrison up to April 17th. He replied on February 5th that by killing his animals and living on grain and horse flesh he could hold out up to that date. In point of fact he exceeded this limit by 12 days.

The period between January 21st and the first week of March was one of preparation. The concentration of the 3rd Division was completed, and the medical units of this and the 7th Division also reached the front, though without their transport. On March 7th orders were issued for an advance from the position held by the 3rd Division on the right bank of the Tigris near Orah to that portion of the enemy's line which lay between the Sinn Aftar and Dujailah redoubts. The troops detailed for this operation were grouped in three columns. The 9th, 28th and 36th Infantry Brigades under Major-General Kemball made up Columns "A" and "B," while Column "C" consisted of the 3rd Division under Major-General Keary.

41. *Attack on Es Sinn.*—General Aylmer's plan was to capture the Es Sinn position by turning its right flank and seizing the Dujailah redoubt. Column "C," mainly composed of the 3rd Division, was directed against the Sinn Aftar redoubt and the works to the south of it, while Column "B," composed of the 9th and 28th Infantry Brigades, was detailed to assault the Dujailah redoubt. Column "A," consisting of the 36th Infantry Brigade, was directed to clear some trenches which flanked the advance of Column "B." The 35th Infantry Brigade was to protect the right, and the 6th Cavalry Brigade the left flank of the force, and a brigade was held in reserve. Each column was allotted its proper proportion of guns, engineers, field ambulances and transport. The advance was made on the night of March 7th-8th. After a long and well-executed night march, the troops reached the positions of deployment. All the columns should have got there before dawn, but the march of Columns "A" and "B" was delayed owing to various unforeseen circumstances, with the result that it was broad daylight before they were ready to deploy, and this manœuvre had then to be executed under fire. An assault was made and a lodgment effected in the Dujailah redoubt, but our troops were eventually bombed out and had to retire. Orders were then given for a fresh assault, and at 5.15 p.m. the troops advanced according to orders, but could get no nearer to the redoubt than about 1,200 yards. The men by this time were exhausted, and about 6 p.m. orders were received to withdraw under cover of darkness. The night of the 8th-9th was spent in collecting and sending away the wounded, and by 9.30 a.m. on the 9th the evacuation was completed. The force then marched back to Orah and Wadi whence it had started. Our losses in these operations amounted to about 470 killed and 2,877 wounded and missing. The total casualties from January 6th to March 9th amounted to 12,116, of whom 2,412 were either killed or died of wounds. The casualties among British officers were 410.

42. *Attack on the Umm-el-Hannah and Falahiyah positions.*- On March 11th General Aylmer was replaced in command by Sir George Gorringe, and during the month the force was reinforced by the 13th Division under Major-General F. S. Maude, besides other troops. On April 5th General Gorringe commenced his operations for the relief of Kut. After the attack on Umm-el-Hannah on January 21st, which was made across the open, our trenches were pushed forward gradually to within 100 yards of the Turkish defences. After a heavy bombardment, to break down the enemy's entanglements, the assault was delivered at 4.45 a.m. on the 5th, and the first line captured by our troops soon after dawn. The other lines were captured in quick succession, the artillery fire being lifted from trench to trench until the last line was reached, fully a mile in rear. Our losses were slight and the enemy's resistance was not great, as most of his troops had been withdrawn to the Falahiyah position. The latter consisted of a system of entrenchments 2 miles deep, which were

rushed after dark the same day by the 13th Division. Our losses were not heavy considering the stubbornness of the enemy's resistance and the nature of the terrain.

43. *Attacks on the Sannaiyat position. Battle of Beit Aieesa.*—Meanwhile the 3rd Division had gained ground at Abu Roman on the right bank of the Tigris, and by April 7th was able to enfilade the Turkish position at Sannaiyat on the opposite shore. After a heavy bombardment, the attack of this position was made early on that day by the 7th Division, and again on the 9th by the 13th Division, but both attempts failed. Operations were much hampered by floods and bad weather. Our losses on these occasions were very heavy.* On the 12th further progress was made on the right bank. The enemy's advanced lines were forced back from 1½ to 3 miles, and our troops had to wade across an inundated belt from 500 to 1,200 yards wide, extending from the Tigris to the Umm-el-Brahm marshes. The advance was continued on the 15th, when more ground was gained and some of the enemy's forward trenches taken. On the 17th this success was followed by the capture of the Beit Aieesa position. The Turks lost heavily, and a number of prisoners were captured. That evening the Turks made a formidable counter-attack with some 10,000 men. The attack began at about 7 p.m., having been preceded by a bombardment, and continued throughout the night till 4.30 a.m. The enemy came on in dense formations and penetrated a part of our front. Six distinct assaults in mass were launched on one of our brigades. Within 500 yards of its front from 1,200 to 1,500 dead Turks were counted. Their losses in killed alone on the night of the 17th-18th are estimated at over 3,000. The number of wounded was no doubt proportionately high, and close on 400 prisoners were taken. The Turkish casualties on this occasion are believed to have been greater than in any of the previous actions for the relief of Kut. Our own losses from April 17th to 19th were 126 killed and 1,200 wounded or missing.

44. *Renewed attacks on the Sannaiyat position.*—After a systematic bombardment the Turkish position at Sannaiyat was again attacked on the 22nd. Owing to floods, which restricted the front, only one brigade could be utilised. The leading troops penetrated the enemy's first and second lines through bog and submerged trenches, and a few got up into the third line. They were, however, unable to maintain their position under the enemy's counter-attacks, and other brigades, pushed up on the right and left to reinforce, failed to reach their objectives, which had to be approached over flooded and boggy ground swept by fire. Although the attempt failed, the enemy lost heavily when they left their trenches to counter-attack, owing to the accurate fire of our machine guns in action on the right bank. Our losses at Sannaiyat between the 21st and the 24th amounted to 93 killed and 1,035 wounded or missing. Our total casualties in the attempt to relieve Kut amounted to 21,973.

45. *Capitulation of Kut.*—An effort was made on the night of April 24th to send the steamer "Julnar" through to Kut, laden with supplies. Though carried out with the utmost gallantry the attempt failed, the vessel being stopped by an obstacle and forced aground near Magasis, about 4 miles from Kut. On April 29th the garrison of Kut capitulated after a siege of five months, and about 2,750 British and 6,500 Indian soldiers became prisoners of war. The garrison had been put on half rations in January, and since February had subsisted on a meagre allowance of horseflesh and barley bread. The last day's ration was consumed on the day of the surrender. By an arrangement made with Khalil Bey, the Turkish Commander, sick and wounded British and Indian officers and men, who were in hospital when the capitulation took place, were exchanged for an equivalent number of Turkish prisoners. Excellent arrangements were made for their evacuation down river, and within a few days of their leaving Kut they were *en route* to India on well-equipped hospital ships, where they received every possible care and the comforts which they had been so long denied.

* The total casualties, including killed, wounded and missing, were 4,036 between April 4th and 8th, and 1,971 on April 9th.

46. *Medical arrangements of the campaign.*—Having given an epitome of the history of the campaign, we proceed to discuss the main question referred to us for enquiry, namely, the adequacy or inadequacy of the arrangements made for the collection, treatment and removal of sick and wounded during these operations, the causes of any defects found to exist, and the results which ensued therefrom.

47. We think it expedient to state our answer to this broad question at the outset. We are constrained to say that in our opinion these arrangements were manifestly inadequate and that, in consequence, the sick and wounded underwent great suffering which might have been avoided by better medical organisation.

Many of the defects which contributed to this result were of a general character, and have affected the whole or a great part of the campaign, and it will be convenient to discuss them before examining those which only affected particular phases of the operations.

48. *Hospital river steamers.*—The first deficiency to which we desire to draw attention is the absence of any river steamers equipped for the transport of sick and wounded, and of any separate medical establishments for such vessels. We believe that this has had more prejudicial results than almost any other defect in the organisation. It has constantly delayed evacuation, dislocated medical arrangements and caused great suffering and injury. So long as operations were confined to the immediate vicinity of Basra there was no need for any such transport; but directly columns advanced up the Tigris, Euphrates and Karun the necessity of some means of speedily evacuating the sick and wounded by water became apparent. In December, 1914, the expeditionary force advanced to Kurna, 40 miles up the Shatt-el-Arab from Basra. In February there were operations up the Karun river as far as Ahwaz, 139 miles from Basra. In May the campaign had extended up the Tigris to Amara, 135 miles from Basra; and in July, 1915, a force was despatched up the Euphrates to Nasariyeh. From all these columns the sick and wounded, the numbers of which were large, were evacuated, either in ordinary river steamers not properly fitted up for hospital work, or in *mahailas*, the requisite personnel and equipment being improvised from medical units on the spot. The culminating point was reached at the battle of Ctesiphon in November, 1915, and in the actions on the Tigris in January, 1916, when the number of wounded was very large.

49. It must be borne in mind that when these latter actions took place the medical personnel and equipment were insufficient for the due care of the wounded in the hospitals and field ambulances, and that from an early period of the war the number of river steamers and barges available for purely military requirements was entirely inadequate. It was, however, from this deficient staff and equipment, and from a steamer service not intended for the purpose, that some means of evacuating the wounded to the base had to be improvised. This journey was not a matter of a few hours, but of many days. Some vessels after the battle of Ctesiphon were, in fact, delayed a fortnight *en route* by various causes. It was, therefore, the more necessary that proper accommodation should be provided for the patients, and that the supply of medical and subordinate personnel, and of surgical and medical stores and comforts, should be complete. We have however ample evidence, much of it of a terrible kind, to show that the failure to provide proper hospital steamers and the necessary medical personnel and equipment caused great suffering. The steamers and barges employed for evacuating the wounded on these and other occasions had often been used for carrying animals to the front, and the decks were in some cases soaked with urine and dirt. There was no time to clean or disinfect them effectually, and they had to be used in this condition. They were not fitted with any effective protection from the sun or rain, and on many occasions the patients were for days together wet through. The arrangements for the supply of drinking water were very defective. The latrines were insufficient and insanitary. The vessels were overcrowded. The patients were not, save in few cases, provided with camp beds, and, according to the evidence, even rough mattresses stuffed with hay were not often available. On particular occasions even the supply of blankets gave

out. The medical personnel was insufficient to cope with the numbers on board, and the supply of surgical and medical stores and appliances was on occasions deficient. The cooking galleys were so few that food could not be prepared for all the patients, and the staff to prepare and distribute this food was too small to meet requirements. There was little or no crockery or cutlery, and a very small supply of cooking utensils. The number of sweepers and of bed-pans was often not sufficient for the comfort of the patients. The sufferings of many of those who travelled by these steamers were in consequence acute, and though the available staff was untiring in its efforts to cope with the difficulties of the situation, we cannot but come to the conclusion that in many cases the lack of proper accommodation and of adequate treatment retarded and prejudiced the chances of recovery. It ought, however, to be stated here that the sufferings of those who travelled on many of these steamers were often mitigated by the resource and foresight of the medical officers in charge. Further, when the number of patients was small and the medical and subordinate establishment proportionately large, the hardships of the patients were much reduced.

50. In some cases, notably on the Euphrates, the sick and wounded have frequently been evacuated in convoys of sailing boats, in which all the disadvantages experienced on river steamers are accentuated. The various boats in the convoy must from time to time separate, and it is impossible for the medical officer in charge to look after the patients in the different boats properly. Moreover, a voyage by country boat, for a long distance, must, if the wind is unfavourable, be a very slow matter. We were, in fact, so much impressed by the necessity for improving the methods for evacuating the sick and wounded from Nasariyeh, that we addressed the local military authorities on the subject, and have been informed that in future a hospital steamer will visit Nasariyeh from time to time for this purpose. This is the more necessary in view of the increased Force which is now stationed there.

51. We shall have to deal with this point further in discussing particular phases of the campaign, but generally it may be said that this lack of river hospital steamers properly equipped with medical personnel, stores and appliances, has been a frequent source of discomfort and suffering, which was accentuated in November, 1915, when the number of casualties increased, and in January, 1916, when the number of wounded was very large and the weather conditions were singularly unfavourable. In March, 1916, conditions improved immensely, because regular units of medical personnel and equipment were detailed for service on these steamers. Even when we left Mesopotamia, the arrangements were, however, in many respects far from satisfactory. It is true that a regular staff of medical officers and subordinates is now assigned to each steamer with a proper supply of medical accessories and comforts, and that such arrangements as are possible are improvised for the accommodation of patients. But the steamers cannot be delayed, and it is not possible to fit them up properly before they begin their return journey down river loaded with sick. They are not weather-proof, and patients get wet through when it rains. Cots are not provided, save usually for a few officers, and not always for them, and many of the other defects to which reference has already been made have not been removed or remedied.

52. We are informed by the Director of Royal Indian Marine that in January, 1916, he was directed to fit out hospital river steamers and barges to accommodate 2,000 patients. To give effect to this demand, he proposed to equip 8 sternwheel steamers and 16 barges, the intention being that each steamer should tow two of the barges. Of these 8 steamers, three only have hitherto arrived, namely—

The "Sikkim," with accommodation for 144 patients
The "Coromandel," with accommodation for 101 patients;
The "Ardhlui,"* with accommodation for 50 patients;

and of the 16 barges four only, with accommodation for 224 patients, have so far been supplied. We were, however, informed that it has been suggested that the complement of barges should be made up by utilising 11 barges already sent to Basra, and that the necessary fittings for the equipment of these vessels have been provided.

53. Of these steamers, the "Sikkim" is satisfactory though not very weather-proof; but it has been found that she cannot tow two barges up and down the Tigris with safety. The "Coromandel" is in many ways unsuitable. We were informed that on her first trip the engines frequently broke down, that she does not steer well, and that she is not built strongly enough for work on the rivers of Mesopotamia. From what we saw of her after this trip (and she had never been used again up to the date on which we left Basra), we think there is much force in this last criticism, unless she had been navigated in some unskilful manner. On inquiry from the Director, Royal Indian Marine, we were told that she could tow two barges at a rate of 4.5 miles per hour in still water. As the Tigris has a current of 4 miles and more in many places, it follows that this steamer is of very little use for towing up stream. The "Ardhlui" had not been used when we left Basra, but the medical authorities there have criticised her as unsuitable for the number of patients she was intended to carry, and also for other reasons. As to the barges, it is perhaps fortunate that the full complement has not been sent, as the evidence before us indicated that the four which have already been despatched are not in any way suitable for work in Mesopotamia. In the first place, they are composite barges of wood and iron, and though the Director maintains that barges of this kind are structurally as strong as iron barges, the fact remains that officers with local experience state that this is not so. It has been found also that these barges cannot be navigated with safety in certain reaches of the Tigris. They are, moreover, extremely hot and none of them are fitted with electric fans, which are a necessity for any hospital craft during the hot weather. Finally, they are not weather-proof. The number of barges and lighters available for work in Mesopotamia is insufficient to meet military requirements, and doubtless for this reason the 11 barges which the Director suggested should be fitted out as hospital barges, have not been so equipped. The result is that the only regular hospital river steamer which was at the time of our departure used for evacuating sick and wounded to Basra, nearly 18 months after the commencement of the war, was the "Sikkim," which can accommodate 144 patients, and that for the large majority of patients, ordinary river steamers and barges, which take troops and supplies up stream, were still employed.

54. In a telegram from the Army Commander to the Chief of the General Staff, dated April 24th, 1916, it was stated that, in addition to the steamers already mentioned, the "Ailee" was being fitted out to carry 50 patients, and that it was intended that three of the Nile paddle steamers should be used to tow hospital barges from the front, down the Tigris to Amara. It was anticipated that in this way 350 patients could be evacuated at one time to hospitals at that place. While we appreciate the desire of the local authorities to make the best of the material available, we doubt if these arrangements will prove entirely satisfactory. The Director, Medical Services, Mesopotamia, in a note to which this telegram is annexed, states that these barges are not suitable for use in the hot weather, and they certainly are not fitted with any electric plant, which we consider to be an absolute necessity for properly equipped river hospital steamers. The Nile steamers are also not fitted with this machinery. The intention, throughout, has been that hospital steamers should be fitted with electric machinery, and that this plant should provide the current necessary for electric fans on the barges, and much of the advantage of having properly equipped hospital barges will be lost if they are not provided with electric fans.

55. We find considerable difficulty in ascertaining the responsibility for the failure to provide hospital river steamers for the expeditionary force. We are not clear as to what the ultimate intentions of Government were in regard to this campaign. If it was contemplated that the expeditionary force should operate at a distance from Basra, up the rivers of Mesopotamia, we think that those responsible for the equipment of the expedition should have sent hospital river steamers either with, or immediately after, the force. Even if the advance from Basra was a later development, we consider that the necessity for this class of transport might have been realised earlier

* After structural alterations.

both in India and in Mesopotamia. We have examined a mass of correspondence which has been submitted to us to ascertain why this question of river hospital steamers was not taken up earlier, and we have made definite inquiry from the Army Department as to when it was first raised. We have ascertained that the question of river transport for the sick was first considered in February, 1915, when a private organisation in Bengal offered to provide an ambulance steamer or barge for the use of the force in Mesopotamia. This offer was accepted, but the flat selected and equipped for the purpose was unfortunately lost at sea while *en route* from Calcutta. It was then suggested that motor launches should be used for the speedy evacuation of the sick and wounded, but for reasons which commend themselves to us as sound, the Military Authorities in Mesopotamia did not accept this offer. Motor launches are necessary, but they are not suitable means of evacuating large numbers of wounded from great distances, and can only be used profitably for taking patients for a short distance from one hospital to another, or to a hospital steamer. This correspondence is, however, of some importance, as it indicates that the attention of the authorities in India was drawn to this question of river hospital transport very early in the campaign. It is, in the circumstances, somewhat surprising that systematic efforts were not then made to put matters upon a proper footing.

56. The first indication which we have been able to discover of any definite steps to remedy this state of affairs, was in December, 1915, when a telegram was addressed to the Secretary of State stating the necessity for a number of regular hospital steamers. The figures before us indicate that previous to the date upon which this telegram was sent, more than 11,000 patients had been evacuated down the various rivers of Mesopotamia to Basra, and we feel, if the facts have been placed fully before us, that steps should have been taken earlier to remedy the want. As a result of the telegram to the Secretary of State, the Director, Royal Indian Marine, was in January, 1916, asked to provide four paddle steamers and 8 barges, each steamer with its two barges being sufficiently large to accommodate 500 patients. These were, however, not provided, and in lieu thereof, and in spite of the recommendations of the local officers, three stern wheel steamers which cannot tow barges down the Tigris, and four small composite barges which are for various reasons unsuitable, have been supplied.

57. While, however, we consider that the authorities in India are in great measure responsible for this defect in the organization, we think that the conduct of the medical and military authorities in Mesopotamia is also open to criticism, and we do not believe that they realised the serious danger that they were incurring by the failure to provide more suitable means of evacuating the sick and wounded by water; at least if they did realise this, we cannot find that, up to December, 1915, they had made any requisition on the Indian authorities for properly equipped river hospital steamers. In the early part of 1915, Surgeon-General Hathaway, then Deputy Director, Medical Services, Mesopotamia, had six or eight *mahailas* fitted out for hospital work; these were towed by tugs which accompanied the troops, and he stated that they met his requirements well. We cannot agree with the Surgeon-General that vessels of this kind ever were, or could have been suitable means of transporting sick and wounded on long journeys, particularly during the hot season. They may, no doubt, have been very useful as a makeshift, but we do not think that a few country boats could have been adequate for the evacuation of the sick and wounded of a force of 30,000 men operating in three different directions, that is, up the Euphrates, Tigris and Karun. It is right to say, however, that in June, 1915, Surgeon-General Hathaway applied to the authorities in India for four tugs for the purpose of towing these *mahailas*, and that this demand was refused on the plea that such vessels were not available. Shortly after this, Surgeon-General Hathaway apparently recognised that some more suitable arrangements were necessary, for we find that in August he asked the Inspector-General of Communications that a river steamer, capable of accommodating 150 patients, should be placed at the disposal of the medical services—a demand which was summarily rejected. The provision of such a steamer would no doubt have been useful for the evacuation of sick and wounded from Ahwaz and other minor garrisons and also for the transport of medical units and stores; but it would obviously not have met the requirements of the situation in the operations on the Tigris in the winter of 1915-16, when the casualties ran to thousands. We consider that this demand, coupled with the one previously referred to, illustrates the failure of the head of the medical administration in Mesopotamia to appreciate the real needs of the situation, for what was wanted was not one small hospital steamer, but a number of vessels, properly equipped with necessary personnel and appliances, capable of accommodating 2,000 or 3,000 patients. It is, nevertheless, a matter for some regret that the refusal of the Inspector-General of Communications to concede this very moderate demand, and the reply of the authorities in India to the request for tugs, were so readily accepted as final. We believe that an officer of greater force of character would have pressed his demands for separate transport for the medical services much more strongly. The only other documentary evidence of any demand in 1915, for hospital steamers, is a telegram of December 7th, in which the Deputy Director, Medical Services, Mesopotamia, informs the authorities in India that recent experience (he refers to the evacuation of the wounded after Ctesiphon) had confirmed his opinion that well equipped river hospital steamers were absolutely necessary for the sick and wounded.

58. We also doubt whether the military authorities in Mesopotamia treated the medical services with much consideration in this matter, or whether they sufficiently realised the need of such steamers. We recognise that their difficulties in the matter of river transport were very great, and that they found it hard to meet the many urgent demands made upon them; but we think that there were occasions on which the medical requirements might have received more favourable treatment. Further, once the need for hospital river steamers was brought to the notice of the military authorities, we think that they ought to have informed the authorities in India of the position of affairs and of the imperative need for such vessels. We are indeed forced to the conclusion that the necessity for an adequate provision of this kind of transport was overlooked both in India and in Mesopotamia, until the sufferings of the wounded after Ctesiphon made it apparent that some systematic steps must be taken to remedy the deficiency. The delay in providing this form of transport is the more to be regretted because it is now difficult, indeed almost impossible, to get river hospital steamers towed across the Arabian Sea to Basra. The Director, Royal Indian Marine, has informed us that if he had had proper notice he could, in seven months, have had the requisite number of vessels built and equipped in this country, according to specification. Assuming this to be correct, if the necessary instructions had been given early in 1915, these vessels could have been built in the summer months and taken across the Arabian Sea to Basra in the most favourable season of the year.

59. In view of the fact that it will probably be impossible to send river hospital steamers from India during the present monsoon, some local arrangements ought, in our opinion, to be made for the evacuation of the wounded. We suggest that, as soon as military requirements admit of this course, two of the large steamers now in use on the Tigris and four commodious barges should be regularly fitted out and equipped for hospital work. We are informed that one steamer so fitted out could, with two barges, accommodate 500 patients, and if the vessel were properly equipped with electric fans and lights, and with ice machines or large ice chests, we think that it would probably be more convenient for hospital work in Mesopotamia than some of the hospital steamers which have been sent for that purpose.

60. For the evacuation of less serious cases, and as a temporary arrangement pending the equipment of these steamers, we consider that selected steamers and barges, out of those now available in Mesopotamia, should be used for hospital purposes and that systematic efforts should be made to improve the accommodation on these vessels. The awnings should be renewed and made water-tight, or, if this is not possible, replaced by some more adequate covering. Cots should be provided for all patients—folding beds of the "X" or American "gold medal" pattern, or some similar kind, would answer very well for this purpose. Proper arrangements should be made for the supply of pure drinking water, and a

sufficient number of sanitary latrines should be fitted on each vessel. Suitable and sufficient galleys should be provided for cooking food, and a supply of lamps, linen, pillows, cooking utensils and the requisite crockery and cutlery, should be stored on board each vessel. Finally, some responsible person should be put in charge of these articles of equipment and be detailed for permanent duty on the vessel with a small subordinate staff to keep both the vessel, and all the equipment, clean and ready for use. If these improvements were effected, and an adequate medical personnel with the necessary equipment supplied on each occasion on which the vessel was used for transporting sick and wounded, we believe that the discomfort at present caused would be much alleviated. We recognise that the real remedy, however, for this defect is the provision of properly equipped hospital steamers, and we only suggest the above as a temporary expedient and as a practical method for immediately improving the existing condition of affairs.

61. *Inadequacy of medical personnel and equipment.*—Another defect of the first magnitude has been the inadequacy of medical personnel and equipment. The force originally despatched to Mesopotamia consisted of one division, and the medical establishment was four combined field ambulances of five sections each (that is, two sections British and three sections Indian), one combined clearing hospital of 200 beds (one section British and three sections Indian), two and a half sections, comprising 250 beds, of a British general hospital, six sections of an Indian general hospital of 600 beds and one Indian stationary hospital of 200 beds. This establishment was possibly adequate for one division according to the authorised scale, though a comparison with the standard prescribed in the official manual entitled "War Establishments, India," shows that the British general hospital establishment was short of the personnel and equipment for 50 beds. On the other hand, it is fair to say that the Indian general hospital complement was 100 beds in excess of the authorised scale.

62. By February 1st, 1915, the expeditionary force had increased to 20,000 men, and in March it was decided to augment the strength to two divisions by the addition of the 12th, 30th and 33rd Infantry Brigades, and also to send the 6th Cavalry Brigade as a further reinforcement. No corresponding increase was made in the medical establishment. One combined field ambulance of four sections was despatched to Mesopotamia for service with the 33rd Infantry Brigade, and an Indian cavalry field ambulance consisting of three sections was sent with the 6th Cavalry Brigade. No field ambulances accompanied the 12th or 30th Infantry Brigades, and no additional clearing, stationary, or general hospitals were sent for the new division. In regard to one of these items, *viz.*, the field ambulance of the 30th Infantry Brigade, it is right to state that the military authorities in India addressed General Barrett, who was the General Officer Commanding the expeditionary force, as to the necessity of sending a field ambulance for this brigade, and that he replied that he could manage without it. No satisfactory explanation has, however, been offered as to the failure to send other units, and the net result was that whereas the force was increased to two divisions *plus* a cavalry brigade, the medical establishment was, save for the addition of seven sections of a field ambulance, that which had been thought necessary for one division only.

63. We find it difficult to understand the principle upon which this establishment was considered sufficient. It was known that the campaign in Mesopotamia would have to be conducted under singularly unfavourable conditions Much of the country is low-lying and marshy and is constantly liable to floods. The atmosphere is in many parts excessively humid, and the temperature is very high, rising in the hot weather, as we were informed, to 125 degrees. It might, therefore, have been anticipated that a high rate of sickness would prevail among the troops. Further, the Turkish force in occupation of the territory invaded was considerable and the countryside swarmed with hostile Arabs. There was, therefore, in our opinion, no reason to think that the ordinary scale of medical units as laid down in "War Establishments, India," would not be needed. Experience has indeed shown that, if anything, that standard requires to be increased.

64. In the early part of the war, the insufficient provision of field ambulances was, however, less serious than the insufficiency of hospital accommodation, which became evident as early as April, 1915. At this period, the British General Hospital of 250 beds and the Indian General Hospital of 600 beds, which had been established at Basra, were overcrowded. For some time the staff of these hospitals had been depleted by sickness, and by the fact that the personnel for transports, which were used for the evacuation of sick and wounded, had to be provided out of the medical units of the force. At the same time the sick and wounded began to increase alarmingly, so much so that after the battle of Shaiba the patients in the Indian General Hospital numbered over 1,000. The actual personnel available to treat these patients was 15 medical officers and 19 medical subordinates, against an authorised scale of 22 medical officers and 40 subordinates. During this month, the Deputy Director, Medical Services, Mesopotamia, was, it may be added, so impressed with the need for increasing the hospital accommodation, that he ordered the Indian General Hospital to expand to 1,000 beds and the British General Hospital to 500 beds. As, however, no personnel was at the time added to deal with the increased number of patients, this order was of little value in effecting any relief. It has been suggested, indeed, that the only result was that the hospital authorities were thereby empowered to draw cerain articles of equipment from the Supply and Transport Corps. But this is perhaps hardly just, as small additions to the establishment were subsequently made from time to time.

65. As the hot weather advanced, the deficiency in hospital accommodation became more and more marked and on June 15th we find the position was this, that the British General Hospital which had started as a 250 bed unit with 7 medical officers and 10 assistant surgeons, had a staff of 6 officers and 8 assistant surgeons to treat 635 sick; and that in the Indian General Hospital 13 medical officers, 1 assistant surgeon, 19 sub-assistant surgeons and 38 sepoy ward orderlies (that is, a staff smaller than the staff authorised for the treatment of 600 patients) was endeavouring to treat 1,671 sick and wounded. On June 17th the Officer Commanding the Indian General Hospital reported that he had only 12 sub-assistant surgeons fit for duty. These deficiencies were not completely made up throughout 1915, although from time to time additional officers and subordinates were sent out. The figures furnished to us by the office of the Adjutant General at the Base indicate that the only additional complete hospital units sent out to Mesopotamia, between November, 1914, and December, 1915, were the Bengal Stationary Hospital (which is an institution maintained by private subscription and equipped normally for the treatment of 200 patients) and one section of a British General Hospital, sufficient for the treatment of 100 patients

During this period, the strength of the force increased approximately from 12,000 to 40,000 men, and the information which we have been able to collect makes it clear that, from the date on which a second division came to Mesopotamia, the general hospital accommodation was insufficient for the needs of the force. Fortunately, as the weather got cooler, sickness was not so prevalent, and after July and August the number of patients in the hospital decreased for a time, but even then the personnel was often insufficient. It is true that when the 3rd and 7th Divisions arrived in Mesopotamia during December and January, additional stationary, clearing and general hospitals were sent with them; but, as explained later, these units arrived so long after the fighting portions of the divisions, that for some time the lack of hospital accommodation and personnel was as apparent as it had been during the hot weather of 1915. Another cause which contributed to this result was the despatch of a number of additional brigades to Mesopotamia from India in the autumn of 1915 without any hospital units. Indeed the figures supplied to us show that the maximum number of patients in the British General Hospital at Basra in the month of January, 1916, was 1,038, the staff consisting at the time of 9 Royal Army Medical Corps officers, and 11 assistant surgeons. In the same month the average number of patients in the Indian General Hospital was 1,230, the establishment being 12 medical officers as against an authorised scale of 28, and 20 medical

subordinates as against an authorised scale of 48, for that number of beds. It can therefore safely be said that the officers in charge of the various hospitals have had, from an early stage in the campaign, to contend with great difficulties. Not only has it been impossible to secure proper buildings for the accommodation of all their patients, and difficult, in hospitals outside Basra, to obtain the necessary drugs and appliances with reasonable expedition, but there has been a consistent shortage in the personnel necessary to treat the number of sick and wounded. This shortage has been particularly felt in respect of assistant surgeons, sub-assistant surgeons and menial staff. We believe that the patients, especially in the British general hospitals, have suffered less from these inadequate arrangements than might have been expected, owing to the great resourcefulness, energy and devotion to duty of the medical personnel and subordinate staff. We cannot speak too highly of the efforts made by the available staff in all the hospitals to cope with the very difficult situation with which they were faced. At the same time, the evidence before us indicates that on particular occasions, despite the strenuous efforts of the hospital staff, the medical personnel available to treat the patients and to see to their comfort, especially in the Indian general hospital was so deficient that the patients underwent considerable discomfort, and that cases which required constant medical attention and nursing did not obtain them.

66. The deficiencies in stationary and clearing hospitals have been equally great. The Indian regulations contemplate the location of stationary hospitals at all small posts where general hospitals are not required; but during the whole of 1915 there was only one stationary hospital* in Mesopotamia, and the work which should have been done by stationary hospitals at various posts on the Tigris, Euphrates and Karun, such as Ali-al-Gharbi, Nasariyeh, and Ahwaz, has been done by field ambulances. Indeed at Kurna, where the daily number of sick was for some time large, there was for a great part of the year not even a field ambulance to receive or accommodate the patients, and regimental medical officers had to make the best arrangements they could. Similarly, in the case of clearing hospitals, the supply of these units has never been sufficient, with the result that hospitals of this class at the front have been frequently overcrowded, and that it has been necessary to supplement them by field ambulances.

67. *Dislocation of the medical organisation.*—Another consequence of the deficiency in hospital establishments has been a general dislocation of the medical organisation of the force. The Field Service Regulations contemplate the following medical units for the treatment of the sick and wounded:—

(1) Regimental medical officers.
(2) Field ambulances, which are divided into bearer and tent sub-divisions.
(3) Clearing hospitals.
(4) Stationary hospitals.
(5) General hospitals.

The duties of each of these units are described in the regulations on the subject. General hospitals are, according to these regulations, large hospitals placed at the base, or at any other post where they are required, for the treatment of severe and prolonged cases. They are equipped for the medical treatment and comfort of all classes of cases, and have the requisite stocks of beds, blankets, cooking utensils, crockery, stores and various appliances. Stationary hospitals are small units, generally posted at places on the line of communications where general hospitals are not needed, and are, according to the regulations, equipped to deal with 25, or in cases of emergency, 50 patients. Clearing hospitals are intended for the temporary reception of sick and wounded, pending and during evacuation from the front. Their functions are similar to those of the tent sub-divisions of a field ambulance, but on a larger scale, and they form the central point on which the collecting zone converges and from which the evacuating and distributing zones diverge. They are normally located at an advanced base and should be pushed up, so as to be in reach of the field ambulances. Field ambulances are supposed to accompany the force to which they are attached, to be in close touch with it during action, and to evacuate the sick and wounded without delay to the clearing hospitals. All of these units are equipped only for the particular duties which they are intended to perform. The supply of stores, appliances, clothing and furniture in field ambulances and clearing hospitals is, for obvious reasons, not large. The organisation prescribed in the regulations has, however, been in great measure abandoned in Mesopotamia. On the Tigris front there were, during the operations in April, 1916, two clearing hospitals only to clear the whole of the wounded of approximately four divisions, while a third hospital of this kind was acting as a general hospital at the base. At Nasariyeh, from July, 1915, to April, 1916, no hospital of any kind was established, and the whole medical work was done by the field ambulances. In consequence of this dislocation, the work of clearing and stationary hospitals has constantly been undertaken by field ambulances which are not equipped for this purpose, and which cannot be called upon to do the work of hospitals without detriment to their legitimate duties. Complaints of this misuse of the various medical units have been very frequent and we think justified. It is not possible to treat patients suffering from disease or wounds satisfactorily, for any prolonged period, in a field ambulance to which no beds and a very limited amount of clothing, cooking utensils, crockery, linen, blankets and medical appliances are supplied, and in which the strength of the subordinate staff appointed to see to the comfort of the sick is very limited. The same remarks apply *mutatis mutandis* also to clearing hospitals, which are only fitted out for the temporary accommodation of patients.

68. *Responsibility for deficiencies.*—As to the responsibility for these deficiencies, we think that the *causa causans* is the insufficiency of the medical establishment in India to meet the demands of a great war, in which troops from India have been largely employed overseas. There is abundant evidence that the available supply of medical officers and subordinates in India, including those in civil employment, has been very largely drawn on to bring medical establishments in Mesopotamia up to the normal scale. Of late, indeed, these resources have been depleted as far as is prudent, having regard to the requirements of India and other theatres of war. We cannot, however, avoid the finding that a serious responsibility attaches to the military authorities in India for despatching reinforcements to Mesopotamia insufficiently equipped with medical establishments. We also think that, during the early part of the war, the authorities in India were not as prompt as they might have been in complying with necessary demands, and that some of the expedients suggested for meeting deficiencies were unsound. We consider that if the medical staff available in India was not adequate to meet the demands of the expedition, assistance from sources outside India might have been sought earlier. The demands of the force, particularly in the way of hospital staff, were frequently put before the authorities in India from an early period in 1915. In April of that year, when the British and Indian general hospitals were expanded to 500 and 1,000 beds respectively, additional Royal Army Medical Corps and Indian Medical Service officers and assistant surgeons and sub-assistant surgeons were more than once asked for, without any result. It was not until the end of June, when the General Officer Commanding represented that there would be a breakdown if conditions were not improved, that additional officers were despatched, together with an Indian stationary hospital maintained by private generosity and one section of a British general hospital. Even then, however, the demands of the Deputy Director, Medical Services, Mesopotamia, were not completely met, and in reply to a request for sub-assistant surgeons, after a great deal of haggling as to what was the correct establishment for the force, the Director of Medical Services, India, came to the conclusion that there was an excess of assistant surgeons and suggested that, in estimating his needs in the matter of sub-assistant surgeons, the Deputy Director of Medical Services should reckon one assistant surgeon as equal to two sub-assistant surgeons. This suggestion, which was not accepted by the local authorities, is on a par with one previously made that in order to make good deficiencies in hospital personnel, the staffs of the

* Excluding the Bengal Stationary Hospital, which is maintained by private subscriptions and was being used as a General Hospital.

field ambulances, which were already inadequate, should be further depleted. We do not think that demands of responsible officers in such a situation should have been met in this spirit. The correspondence on this subject illustrates, in our opinion, the danger of applying ordinary secretariat methods to urgent demands in war time. Instead of accepting the views of the local officers as to the necessity for additional personnel, their figures were challenged and suggestions made that one medical unit should be depleted in order to make good deficiencies in another, and that one man should be counted as equal to two. In the meantime, while this discussion went on, little or nothing was done to relieve the situation.

69. Again in July, the Deputy Director of Medical Services, Mesopotamia, submitted a full statement of his deficiencies and requirements and asked that 13 Royal Army Medical Corps officers, 12 Indian Medical Service officers, 1 assistant surgeon and 47 sub-assistant surgeons should be sent to his assistance. As to the first of these demands, the reply was to the effect that certain Royal Army Medical Corps officers were expected to arrive in India in August, and that some of them would be sent to Mesopotamia. As to the remaining deficiencies, after discussion as to the correctness of certain figures supplied by the Deputy Director, a reply was finally sent in October, that is, three months later, that steps were being taken to make good the deficiencies in Indian Medical Service officers and that 12 sub-assistant surgeons would be sent at the first opportunity. On August 27th, the Deputy Director of Medical Services again reported his deficiency in sub-assistant surgeons, but the authorities in India were unable to afford him any relief, and it was not until November, 1915, that 10 additional sub-assistant surgeons were actually sent.

70. Of late the demands of the expeditionary force have, we think, been more reasonably met, and the situation has certainly improved. In the first place, the deficiencies in the existing medical staff have been partly made up out of a 6 per cent. monthly reinforcement which was sent from June, 1915, and which proved to be more than was needed to replace actual wastage. In the second place the medical units of the 3rd and 7th Divisions, including well equipped hospitals of all classes, reached Mesopotamia early in 1916, and the medical staff of the force has been materially increased in other ways. While, however, we admit that the situation is now far better than it was in 1915, we cannot say that the medical arrangements when we left Mesopotamia were satisfactory in all respects. Not only were many of the patients unsuitably housed, but most of the medical units acting as hospitals were overcrowded and being used for purposes for which they were not equipped. Further, the paucity of the medical and subordinate personnel was, particularly in some hospitals, a cause of anxiety. According to a statement furnished to us by the Assistant Director, Medical Services, India, the total accommodation in general hospitals is now sufficient for 2,000 British and 2,100 Indian patients. In addition to the hospitals specified in this statement, we were informed by the authorities at Basra that the personnel of two additional Indian general hospitals of 500 beds each have arrived in Mesopotamia. The total accommodation in the Indian general hospitals is, therefore, 3,100 beds. The staff of some of these hospitals is, however, below the standard scale, and until reinforcements arrive the position will not be entirely safe. The strength of the force in April was 122,000 men, of whom 38,000 were British. The percentage of sick and wounded in April, 1915, was approximately 7 per cent. The accommodation provided in general hospitals, even taking into consideration the fact that a certain number of sick and wounded must always be detained in field ambulances and stationary and clearing hospitals, is thus barely sufficient for existing needs. The total number of clearing hospitals in the country is four, which is also insufficient according to the normal establishment of the force engaged. This deficiency is, however, engaging the attention of the Director, Medical Services, India.

71. *Future medical requirements.*—It may be advisable here to indicate the manner in which the local medical authorities propose to deal with the situation during the hot weather of 1916. In December, 1915, the Director of Medical Services, Mesopotamia, submitted an estimate of medical requirements for the coming year. He then calculated that accommodation in general hospitals should be provided for 1,800 British and 5,200 Indian patients. He stated that, including the Bengal Stationary Hospital which, though normally equipped for 200 patients, can accommodate satisfactorily a very much larger number, the existing accommodation in general hospitals was adequate for 1,000 British and 2,400 Indians. This left a deficit of 800 British and 2,800 Indian beds, and this deficit the Government of India undertook to make good as early as possible. The position was, however, complicated in March, 1916, by the arrival of the 13th Division, and on March 23rd, 1916, on this account and presumably for other reasons, the Director of Medical Services submitted revised estimates of the requirements in the way of general hospitals, estimating that he needed equipment and personnel for 3,000 British and 6,000 Indian patients.

72. This estimate has been accepted by the Director of Medical Services, India, and to meet the demands for further accommodation for British patients, in addition to the medical units of the 13th Division, a large British general hospital on the English scale, accommodating 1,040 patients, has been despatched to Mesopotamia. To meet the deficiency in Indian general hospitals, one Indian general hospital of 500 beds has already been sent from Egypt, and the personnel and equipment of six complete hospitals* of 500 beds each, and also of three additional sections, each accommodating 100 patients, are being despatched from India. When the demands of the Director of Medical Services, Mesopotamia, have been fully met, and the sick and wounded are accommodated in suitable buildings, provided with proper equipment and fitted with electric lights and fans, we think that the requirements of the situation will have been satisfied. The maximum average daily number of sick and wounded last year in any one month amounted to 9.5 per cent. of the strength, though on one particular date the percentage of sick and wounded exceeded 12.5 per cent. If 10 per cent. is taken as an approximate percentage for the coming year, we think that the proposed provision of accommodation in general hospitals will be sufficient, as a certain number of patients must always be retained in field ambulances and stationary and clearing hospitals. Further, it is probable that the evacuation of the sick and wounded by hospital ships this year will be effected more expeditiously than last year. In these circumstances we can see no reason to criticise this estimate, though at least one of us is a little apprehensive of the result of any sudden outbreak of disease and the effect of the hot weather on a large force of British troops not accustomed to tropical conditions. We ought to state here that a telegram has recently been received from the Director of Medical Services, Mesopotamia, stating that he is about to submit revised estimates of his requirements, and that a further increase in the medical establishment will be required. We do not doubt that this proposal will receive careful consideration. As to clearing hospitals, the situation is not so satisfactory, the present number of hospitals of this class being, as already stated, insufficient for the needs of the force; the Director of Medical Services has, however, been asked to state what his requirements are in this respect. The number of stationary hospitals will really depend on the length of the lines of communication, and possibly when the general hospital accommodation is increased as proposed, and the existing stationary hospitals are available for their legitimate duties, no larger increase in their number will be necessary. We are glad to say that a number of Royal Army Medical Corps and Indian Medical Service officers have recently been sent to Mesopotamia, for employment in general hospitals and to furnish the necessary personnel for river steamers and transports used for the evacuation of sick and wounded. The despatch of these officers will afford great relief to medical units in that country. A large number of additional field ambulances have also been sent.

73. *River transport.*—In the course of our enquiry many witnesses, to whose evidence we attach great weight, have laid stress on the fact that nearly all the

* These include the personnel of two Indian general hospitals of 500 beds each, which have already arrived in Mesopotamia and are referred to in paragraph 70.

difficulties experienced by the staff and administrative services in Mesopotamia have been due to the inadequacy of the river transport. We have been told, over and over again, that owing to the shortage of steamers and tugs of suitable draught and towing power, delays have constantly occurred in carrying out important strategic moves, in sending up reinforcements to the front, in providing the supplies required for the maintenance of the troops, in moving up medical units and their ambulance transport, and in sending up urgently needed medical stores and equipment. The same cause has delayed the despatch of comforts generously provided by the Order of St. John and the various funds organised in India, and by the Joint Committee of the Red Cross Society and Order of St. John in England, to lessen the hardships of the troops. It has also delayed the conveyance up river of the building material and engineering stores required for the construction of hospitals and quarters for medical personnel at places on the line of communications. The delays in providing the hospitals at Amara with electric lights and fans, in sending up disinfectors, water purifying apparatus, water carts and soda water machines, as well as in establishing a field force canteen where officers and men can purchase what they require at a reasonable cost, must also be attributed to the same reason. To this shortage also must be ascribed the unnecessary suffering caused to the wounded, through delays in effecting their evacuation down river, after the battle of Ctesiphon last year and the battles of Shaikh Saad, the Wadi, and Umm-el-Hannah in January last.

74. These views, which are supported by a mass of evidence of the most convincing character, agree with our own conclusions on the subject. We consider that there has been a shortage of river craft ever since the occupation of Kurna, and that despite the large number of steamers and barges now employed on the rivers of Mesopotamia the river transport at the disposal of the General Officer Commanding has never been adequate, and at times has been seriously deficient. Strenuous efforts have been made by the military authorities in India to remedy this defect, but though a large number of steamers and barges have been sent out from time to time, the additions to the river flotilla have not kept pace either with the additions made to the force, or with the increased demands for transport for the supplies, ammunition, medical equipment, engineering and aircraft stores entailed by such additions, as well as by the lengthening of the lines of communication. Thus, though the average river tonnage available in November, 1915, was about 150 tons a day as compared with about 250 tons a day available in April, 1916, the deficit in actual shipping requirements tended, until recently, to increase rather than diminish.

75. When it was decided in November, 1914, to send an expedition to the Persian Gulf, the objective of the force was Basra, and its *rôle* was to secure the mouth of the Shatt-el-Arab and safeguard our interests in the oil-fields east of the Karun. The force employed only amounted to a division, and as its operations were at first confined to the mouth of the Shatt-el-Arab, the need for additional river transport was not felt. Supplies could be brought up to Basra and even Kurna by sea-going ships, and the local resources in the way of river shipping sufficed for the movement and maintenance of the small forces which had to be detached occasionally from headquarters. The policy of Government as regards Mesopotamia was one of caution, and the plan of operations prepared by the General Staff in India did not provide for more than the occupation of Basra, the country north of that place being, as we are informed, outside the sphere of military intelligence for which India is responsible. We mention this fact, as had an advance on Bagdad been contemplated from the outset, river transport of a suitable kind should, and no doubt would, have been provided on a scale sufficient for the number of troops which it was intended to employ.

76. Though the Turks were driven out of Basra, they remained within striking distance of Kurna, and it became evident early in 1915 that they were about to advance from Amara on Ahwaz and from Nasariyeh on Basra. With the prospect of having to detach forces for operations on the Karun and Euphrates, Sir Arthur Barrett, after consulting local experts, asked on January 4th for some steamers of the "Mejidieh" type, drawing not more than 3 feet 6 inches. Knowing, however, that this type was a special one, evolved by Messrs. Lynch Brothers as the result of half a century's experience of the navigation of the Tigris, he added that any river steamers obtainable in India or Burmah of 10 knot speed and not more than 4 feet 6 inches draught, capable of carrying from 500 to 800 men and towing two lighters, would satisfy his immediate requirements. The authorities in India met this demand with promptitude. By May 20th seven paddle steamers of the type suggested had reached Basra, and they were followed soon after by four tugs and four launches. These vessels formed the nucleus of the Government flotilla, consisting of the "P," "T," "L" and "S" classes of river craft, *i.e.*, the paddlers, tugs, launches and sternwheelers, which are constantly referred to in the statements of witnesses.

77. Owing to the nature of the country and the distribution of the population and political centres, any operations against the Turks have to be made along the Tigris, Euphrates or Karun, and in the absence of railways the success of these operations depends on the number and suitability of the steamers and barges available. The river steamers at Sir John Nixon's disposal in the spring of 1915 were sufficient so long as they were only required for the carriage of supplies; but when it became necessary, owing to the flooded state of the country and the expansion of the theatre of operations, to utilise them also for the conveyance of troops and the evacuation of an increasing number of sick and wounded, the shortage of shipping became apparent. This shortage, moreover, was aggravated by the fact that the steamers drawing 4 feet 6 inches, which Sir Arthur Barrett had accepted as suitable, could, during the low-water season, only be navigated with difficulty through the narrows of the Tigris above Kurna, and not at all on the Euphrates or Karun.

78. The navigation of the Tigris demands skill and local knowledge. Some of its reaches are straight, others are extraordinarily tortuous. Some are broad and others so narrow that steamers can only pass each other when one is moored to the bank. The difficulty of finding vessels suitable for employment on this troublesome waterway is very great, for the types evolved by Messrs. Lynch Brothers have, we believe, no counterpart on any other river in the East. The bends of the Tigris are so sharp and the current so strong that the navigation of vessels down stream is very difficult unless they are fitted with independent paddles. Steamers are swept from side to side and hurled against the bank. To protect them and their paddle wheels, and at the same time increase their carrying capacity, it is usual to attach a barge each side. These barges must be built of iron, which will dent on impact without breaking, as wooden barges are crushed like eggshells. Similarly, very few steamers are strong enough to bear the impact of the barges which protect them from the banks, and only steamers fitted with specially constructed cross stanchions can be used to take the stress. Vessels like the Nile and Thames steamers will not stand the pressure, and can only be used in the straighter reaches above Amara. A further complication is that steamers which can navigate the Tigris in flood, will not all go up river when the water is low. We mention these details as a river is generally regarded as an admirable line of communication, offering special facilities for the maintenance of a force and the evacuation of its sick and wounded. In the case of the Tigris, however, these advantages are heavily discounted by the local difficulties above mentioned.

79. Realising these difficulties, which we think were imperfectly appreciated in India, Sir John Nixon asked on May 27th for six powerful tugs, each capable of towing two large flats and with a draught not exceeding 3 feet in working trim. His reasons for asking for these tugs, and for reducing the draught limit from 4 feet 6 inches to 3 feet, have already been stated; but they were accepted in India only after much correspondence, and finally the Marine authorities replied that no vessels answering to the new specification were obtainable. The lack of success in meeting his requirements did not, however, make any real difference at the time to General Nixon's plans, for even if tugs of the type required had been found, it would not have been possible to send them across the Arabian Sea during the monsoon. Nor would it have been possible to send them in pieces to

be put together in the Shatt-el-Arab, for apart from the delays which this would have entailed, the workshop resources of Mesopotamia were not, at this time, sufficiently developed to allow of this alternative. We mention this as many of those who complain about the delays which have taken place in sending out river craft forget that for six months of the year vessels of this type cannot be sent to sea. Indeed their despatch is always attended with considerable risks, as is proved by the fact that 3 paddlers, 5 tugs, 17 sternwheelers, 22 barges, 2 flats, and 1 floating dock, or a total of 50 vessels all told, have foundered between various Indian ports and Basra in the course of the last 14 months.

80. On July 8th, 10th and 17th, when the operations against Nasariyeh were in progress, and the navigation of the Hammar Lake was causing extraordinary difficulties, Sir John Nixon asked India to arrange for the construction of 6 paddlers, 3 sternwheelers, 8 tugs, and 43 barges, and at the same time laid down a very definite specification for each class of vessel. This request was complied with, and on August 3rd the Secretary of State for India was asked to place the order with shipbuilding firms at home. It was not considered advisable to order the construction of these vessels in India, as difficulties and delays connected with the importation of materials and machinery from England, owing to scarcity of freights, made it unlikely that locally built vessels would be completed as rapidly as those ordered from home.

81. A memorandum, prepared by Major-General Kemball, in which Sir John Nixon's requirements in shipping were very clearly explained, was forwarded to India about this time, *i.e.*, August, 1915. After stating that his principal need was light-draught steamers and the personnel and material requisite for their maintenance, he added the significant warning that "if steps are not taken in good time to meet these requirements we shall run the risk of a breakdown at possibly a serious moment. At present we cannot make the most effective use of the troops available owing to want of steamers, and in any crisis insufficiency of river transport would limit the scope of reinforcements."

82. Early in October—that is, just after the battle of Kut-el-Amara—Sir John Nixon asked that some powerful light-draught tugs or sternwheelers might be purchased in India with the least possible delay, for use as stop-gaps pending the arrival from England of the additional river craft ordered through the Secretary of State. He explained that the maximum draught should be 3 feet 5 inches for tugs and 2 feet 6 inches for sternwheelers. The Director of the Royal Indian Marine replied that tugs of this type were unobtainable. Sternwheelers of the kind required could be secured, but it was virtually impracticable to tow them from Rangoon to the Persian Gulf, as owing to their fragile construction they would break up in the slightest sea. The correctness of this statement is proved by the fact that out of 24 sternwheelers sent from time to time only 7 reached their destination. On October 24th General Nixon reported that the Tigris was rising and suggested that more Irrawaddy paddlers might be purchased—that is, steamers drawing 4 feet 6 inches—the very class of vessel to which he had previously objected. A great point was made by the authorities in India of the apparent inconsistency of this demand, but we do not consider that the criticism was of any great weight, as vessels which draw too much water in the shallow season might obviously be useful when the river was in flood and so might help to mitigate a shortage which threatened to become acute. At Sir John Nixon's request the Director, Royal Indian Marine, then furnished him with a list of all the river craft in India or Burma which, though differing widely from the specifications he had laid down, approximated to his revised requirements. As soon as he had made his selection of the craft available, steps were taken to requisition the vessels demanded, and towards the end of January they began to arrive at Basra. They have since been supplemented by steamers from England and Egypt, and by the beginning of May the total number of steamers at the disposal of the General Officer Commanding in Mesopotamia was 44, exclusive of 24 steamers, 52 tugs and 3 sternwheelers either *en route* from, or under construction in, England or India.

83. Apart from the provision of additional river craft, the introduction of better methods of control and administration on the lines of communication and at the base has recently improved the situation, and when the steamers under construction or ordered become available, there should be no recurrence of the serious shortage of shipping which existed between July, 1915, and April, 1916. The working margin is, however, still somewhat fine, as the number of steamers withdrawn from work for repairs tends to increase, owing to the excessive strain imposed on them during the past year. Having regard to the uncertainties of navigation on the Tigris and Euphrates, we consider that the position as regards transport will not be really satisfactory until a channel has been dredged across the Hammar Lake, and until the railways about to be constructed to Nasariyeh and Amara become available for the conveyance of the sick and wounded as well as of troops and stores.

84. We find that there has been some misunderstanding between the General Officer Commanding in Mesopotamia and the authorities in India on the subject of river transport. The local authorities were, in our opinion, unreasonable in their demands for steamers of a type which is special to the Tigris, and they hampered the action of the authorities in India by failing to state that the specifications to which they adhered with such insistence applied only to river craft which had to be built, and not to vessels obtainable by purchase. Further, had the General Officer Commanding in Mesopotamia explained that his objection to vessels drawing 4 feet 6 inches applied only to the low water season, and had he intimated earlier that he was prepared to accept steamers of good towing capacity with a maximum draught of 6 feet, a large number of vessels might have been sent to Basra during the fair weather season. It was the limitation as to draught, combined with the condition that they should be able to tow two large barges, that prevented the earlier offer, by the Royal Indian Marine, of many of the vessels which Sir John Nixon subsequently accepted.

85. On the other hand, the authorities in India appear to us to have been somewhat lacking in foresight. They must have been aware that the advance to Kut-el-Amara, with the possibility of an advance on Bagdad and the despatch of reinforcements from oversea, would be likely to create a demand for additional shipping. They must have realised that the river craft which had barely sufficed for two divisions would not suffice for four, especially with a line of communications some 150 miles longer than before. They must also have known that the steamers ordered from England were not likely to arrive in time to be of use in the contemplated advance, and that local resources would have, therefore, to be supplemented from India or Burma. They seem, however, to have done little to anticipate these difficulties, contenting themselves with trying to meet demands as they arose. The monsoon months, which might have been utilised in selecting river steamers, bringing them down to Calcutta and Rangoon and preparing them for the sea voyage to Basra as soon as the fair weather season set in, were allowed to slip by, little being done until Sir John Nixon made a number of fresh demands.

86. We have examined this question of river steamers in some detail, as we are required by our terms of reference to consider whether the amount of river transport allotted to the medical services was sufficient "with regard to the total amount available and the paramount military requirements for transportation of troops, supplies and ammunition." As we have already explained, the shortage of river transport on the Tigris has always been so great that prior to the arrival of the "Sikkim" and the "Coromandel" it was found impossible to make any permanent separate allotment of shipping for hospital purposes. The question of the sufficiency of the transport provided for the conveyance of the sick and wounded thus merges into the larger question of the transport available for the general purposes of the force, and this, as we have pointed out, was found to be inadequate so far back as when the troops moved from the vicinity of Basra. In support of this contention we cannot do better than quote the opinions of two distinguished commanders. Writing on January 12th, 1916, immediately after the battle of Shaikh Saad, Sir John Nixon remarked that "the wounded with Aylmer have been called upon to suffer unnecessarily owing to shortage of river transport. Not only is it

difficult to bring the wounded down, but it is equally difficult to get medical personnel and equipment up the river." Sir Percy Lake, writing on the same subject about May 12th, soon after the failure to relieve Kut, stated that "as the Commission is aware, the whole situation was dominated by the question of river transport. The amount available was totally inadequate for the ordinary requirements of the force. . . . As the result of this shortage of river craft it was impossible to allot any vessel wholly for hospital purposes or for the transport of the wounded. It was only by utilising every vessel on the river that it was possible to supply the troops at the front with food and ammunition. Even then I could not send up to them more than a portion of their land transport or all their guns, or even all their drafts of men to replace casualties." He concludes his remarks by saying, "I should like to record my opinion that such defects as have been brought to notice—and there were many—were due primarily to the inadequacy of the river transport which prejudicially affected many other services besides those dealing with the care of sick and wounded." In the circumstances so clearly explained by two General Officers who in succession have commanded the expeditionary force, we are of opinion that, prejudicial as the shortage of suitable river transport was to the proper working of the medical services, the latter could not, either at the time of General Townshend's advance from Kut-el-Amara or before General Aylmer's advance to the relief of that place, have been allotted steamers for their exclusive use. The paramount necessity of moving the troops and keeping them fed and supplied with munitions overrode all other demands, and necessitated the employment for general purposes of all the river craft available.

87. We consider that with better organisation and control of river craft on the lines of communication and at the base, greater use could have been made of the shipping available. Numerous instances have been brought to our notice of the miscarriage and overcarriage of stores, of delays to steamers through lack of arrangements for discharging cargo, and of other delays caused by bad staff work, such as the loading of reserve ammunition on the top of the tents, equipment and stores of field ambulances required for immediate use. Many of these mistakes were due to the inexperience of the staff at the base, including the marine transport officers, who were suddenly faced with all the difficulties incidental to the administration of a river flotilla and the control of a crowded port like Basra, which was then destitute of jetties, wharves, storage space and other facilities, and unable to produce even the labour required to unload the store ships which arrived in the Shatt-el-Arab almost daily. These defects are now being made good, and with the classification of river craft and the better system of traffic control recently introduced the working power of the river steamers has appreciably increased.

88. *Ambulance transport.*—The next matter to which we desire to draw the attention of Government is the failure, throughout the campaign, to provide land ambulance transport for the wounded. We consider this matter to be one of great moment, as it is proved that the defect has been the cause of intense suffering and must have prejudiced the chances of recovery in certain cases. The original organisation orders of Indian Expeditionary Force "D" did not include any wheeled transport for the sick and wounded. According to "War Establishments, India," each field ambulance should have been accompanied by eight ambulance tongas, in lieu of which the original orders for this force allotted an additional number of riding mules. The omission to send wheeled transport was probably due to the fact that operations for some time were likely to be confined to the immediate neighbourhood of the Shatt-el-Arab. The history of the campaign shows, however, that very shortly after the capture of Basra the operations extended to a considerable distance from any river, and no satisfactory reason has been assigned for the failure to provide the ordinary form of land ambulance transport for these operations. It is in evidence that on many occasions during the campaign wheeled ambulances could have been employed. In fact, a few motors were used in the Ahwaz operations in April and May, 1915, and again at Ctesiphon in November, and ambulance wagons of the English pattern were employed with conspicuous success to our own knowledge in the operations up the Tigris in the beginning of April, 1916. But throughout the campaign the usual form of ambulance transport has been the army transport cart—that is, a small springless cart made of wood and iron, drawn by mules or ponies, and ordinarily employed for the carriage of supplies. When the evidence of the suffering caused by this means of conveyance, particularly in cases of fracture and severe injury, is considered, it is difficult to avoid criticising the action of those responsible for this deficiency in severe language. It must be remembered that on occasions the wounded were brought in for distances of 12 and 15 miles in these carts. We have been told that at times patients suffered so much on these journeys that some fainted on the way, and others arrived at field ambulances covered with bruises. We have also been informed that in abdominal cases the jolting in such a cart would be likely to cause death, and that in the case of fractures of the femur it would endanger the chances of complete recovery. For these reasons we consider that the use of these carts for conveying sick and wounded, except as a means of supplementing proper ambulance transport, is to be condemned. Nor had this serious deficiency been remedied when we left Mesopotamia, for on April 9th, when there were nearly four divisions operating on the Tigris front, only nine ambulance wagons and four motor ambulances were available for the removal of the wounded from the battlefield. A few more motors, which were at that time at the base, have since been sent to the front; but in May, 1916, the majority of the wounded were still being conveyed from the battlefield to field ambulances in transport carts. It is true that, in certain conditions and in particular parts of the country, motor vehicles and ambulance wagons cannot be used; but on many occasions they can be employed, and tracks on which they can travel can often be improvised without difficulty. For such occasions the supply of suitable ambulance transport is, in our opinion, essential. We are aware that in many cases the removal of all the wounded after a battle in which the casualties are numerous cannot be effected entirely in ambulance motors or wagons; but we think that a sufficiency of these conveyances should be supplied for the evacuation of more serious cases.

89. An examination of the correspondence placed before us indicates that the necessity of providing proper land transport for the wounded was not apparently realised by the military authorities, either in Mesopotamia or in India, in the early part of the campaign; and even up to the present the force is, we believe, entirely dependent on private generosity for the supply of motor ambulances. In February, 1915, the General Officer Commanding, Indian Expeditionary Force "D," was asked by the authorities in India if he would like to have a motor ambulance, and the offer being accepted the ambulance was sent to Basra early in March of that year. No further action was taken until April 20th, when another motor ambulance was offered to the force, an offer which was rejected by Sir John Nixon; and it was not until October 20th that any demand was made by the medical or military authorities in Mesopotamia for a further supply of such vehicles. Four were then asked for, and three were sent. These three were supplemented by six more sent in December and January, but there is reason to believe that none of them were provided by the Government. We are informed, however, that 50 "Star" motor ambulances, which were offered by the Secretary of State in November, 1915, are now on their way to Mesopotamia and will shortly arrive there.

90. Similarly, in the case of ambulance tongas, we find that the first demand for this necessary item of equipment was made in November, 1915, when Surgeon-General Hathaway indented for 50, a demand which he supplemented in February, 1916, by a request for 250 more. Up to recently, however, the ambulance transport in Mesopotamia was composed of the ambulance motors above mentioned, a small number of ambulance wagons, and 50 ambulance tongas, very few of which were available at the front. Although, therefore, we think that the authorities in India are responsible for the failure to foresee the need of this transport, we consider that the inertia of the medical authorities in Mesopotamia in this matter is open to even more severe criticism. In dealing with this subject we must, however, admit that the lack of ambulance vehicles at the front was in great measure due to the shortage of river transport and to

the flooded state of the country which delayed their movement by road. Indeed, it has for these reasons on many occasions not been possible to get the ambulance wagons and motor ambulances available in Basra moved to the front.

91. *Hospital buildings.*—Another point of importance is the unsuitable nature of the accommodation provided in many of the hospitals in Mesopotamia. Buildings in which a certain number of patients can be accommodated with comfort, have been taken over for the use of hospitals, but in many cases the accommodation thus provided is insufficient for all the patients under treatment, and it has not been supplemented by a sufficient number of suitable temporary buildings. At Basra a large number of sick and wounded at the General Hospitals are accommodated in temporary sheds made of matting. These buildings are not weatherproof, and we think that better accommodation might by this time have been provided. At Amara, where a large number of sick and wounded are detained in hospital, the accommodation is in some respects worse. Many hospitals are established in suitable buildings, but this is not always the case. In April, 1916 we found that all the patients of a large Indian general hospital were located in tents, pitched on low and marshy ground. The difficulty of securing a site on a high level at Amarah is insuperable, but there is, in our opinion, no sufficient reason, save the lack of river transport, why temporary sheds on raised plinths should not have been erected there for the accommodation of the sick. We were informed that 60 sheds of an approved pattern were being erected, but 16 months after the commencement of the war and nine months after the occupation of Amara, two of these only were approaching completion. These sheds appeared to be suitable for the purpose for which they were to be used, but up to the date on which we left Mesopotamia we were unable to obtain any definite information as to when the rest of these buildings would be completed. In the meantime the patients of this and some of the other hospitals have to remain in tents. With the climatic conditions that prevail in Mesopotamia during the hot weather this is likely to have a prejudicial effect on their health.

92. *Electric fans and supply of ice.*- -Closely connected with the question of hospital accommodation, is the provision of electric fans and ice in hospitals. In cases of fever and heat stroke and for the comfort of many other patients, electric fans and ice are indispensable in a damp hot climate, and the lack of these essentials during the operations in 1915 was a serious drawback. A certain number of fans were put up in the General Hospitals at Basra last year, but these were not sufficient for all the wards, and none of the new hospitals there had, up to the time of our leaving Basra, been fitted with these fans. Up to the middle of May, 1916, there were no electric fans in any of the hospitals at Amara, although the number of patients accommodated there is several thousands. The same is true of Nasariyeh and Shaikh Saad. We are informed that the necessary plant for the hospitals at Basra and Amara was only indented for by the authorities in Mesopotamia on December 31st, 1915 (the letter being received on January 18th), and on February 21st, 1916. In our opinion, the demand for these installations might have been foreseen earlier. We think, at any rate so far as Basra is concerned, where no question of river transport arises, that every hospital should by this time have been supplied with electric lights and fans. As to ice, we are informed that ice was available for all the hospitals in Basra during the hot weather of 1915, but it certainly was not regularly available in hospitals at Ahwaz, Nasariyeh or Amara, and up to the time of our departure, so far as we are aware, Government had not supplied ice-manufacturing plant to any station in Mesopotamia outside Basra. At Nasariyeh, an old Turkish ice manufacturing plant has been taken out of the river and, through the energy of General Brooking, has been put into working order. It is now run by mechanics taken from a territorial regiment. At Ahwaz, we understand that the Anglo-Persian Oil Company has a machine which at times works satisfactorily. In Amara, the authorities have taken possession of an old ice-making machine, and some attempts to meet the hospital requirements have thus been made, though the machine is old, and last year, according to the evidence before us, it broke down for a long period. On inquiry as to the reason for this state of affairs, we find that on March 6th, 1915, Sir Arthur Barrett was asked if he required ice machines and replied that he did not need any. On June 14th, however, a request was received from Sir John Nixon for four ice machines capable of producing one ton of ice each a day. On July 26th one machine producing two tons of ice, one producing 26 cwts., and one small machine, were despatched to Basra with 2 engineers and 5 mechanics. The delay in despatching these machines to Basra was, we think, unavoidable. In the circumstances, we consider that the authorities in Mesopotamia were responsible for the delay in providing ice machines in 1915.

93. In November, 1915, the authorities in India again addressed the General Officer Commanding Force, "D," as to the number of ice machines he required for 1916. On December 11th a reply was received that five machines, each capable of producing two tons of ice daily, were wanted. On December 22nd these demands were revised and seven machines, capable of producing one ton of ice each day, were asked for. On January 6th a telegram was despatched to the Director-General of Stores, India Office, asking him to supply these machines. On January 19th, the Director-General of Stores telegraphed that four ice machines would be delivered in February and three at the end of March. On February 14th, the military authorities in Mesopotamia indented for three additional machines, each producing one ton of ice daily, and this indent was also forwarded to the Director-General of Stores. On April 1st, the Director-General cabled that the ice machines ordered were promised for shipment at the rate of one a week, commencing from the first week of May, 1916, and that they would be sent to Basra direct. In consequence of this information, steps were at once taken to procure ice machines in India, and in May, four machines, producing about five tons of ice, were despatched to Basra. On May 27th, the Director-General of Stores reported that four machines had been shipped on April 15th and May 11th respectively, and also stated that three would be shipped in June. On June 1st, 1916, another machine capable of producing 1¼ tons was shipped by Indian authorities from Bombay to Basra. In addition to this, the Joint Committee of the British Red Cross Society and Order of St. John have ordered a number of ice machines which, however, up to the time of our leaving Mesopotamia, had not arrived there.

94. The result of all this is that the arrangements for the supply of ice, outside Basra, are at present very inadequate. This is a somewhat serious matter, as ice is not a luxury but, having regard to climatic conditions, an absolute necessity for the treatment of the sick. In our opinion this condition of affairs is in great measure due to the dilatoriness of the authorities in Mesopotamia and of the Director-General of Stores. It appears that no one in Mesopotamia moved in the matter until December, 1915, when the authorities in India asked what the requirements were. The General Officer Commanding, Force "D," then made demands, which he subsequently revised and supplemented. The Director-General of Stores, on the other hand, failed to supply the machines on the dates specified, possibly owing to difficulties in delivery.

95. *Medical stores and equipment.*—The arrangements for the supply of surgical and medical stores and appliances to meet the requirements of the various units in Mesopotamia were, up to March, 1916, unsatisfactory. In the first place the system of supply, laid down in the Medical Manual (War), India, was ill-adapted to meet the demands of a large force operating 1,600 miles from India overseas. In the second place, owing to the lack of river transport, there was such delay and uncertainty in the delivery of these supplies that medical officers have frequently been hampered in their work.

96. The system prescribed in the regulations for the supply of medical stores is that all general, stationary, and clearing hospitals and advanced medical store depôts indent on the nearest medical store depôt in India for their requirements, and, in their turn, the advanced medical store depôts attached to each division issue supplies to regimental and field medical units only. In case of need, the advanced medical store depôts are authorised to draw on general hospitals to meet urgent demands. The inconvenience of such a system, for an expedition operating overseas, is obvious and for such a large force

as was employed in Mesopotamia a complete depôt of medical stores, located within reasonable distance, upon which all units could draw, was clearly necessary. We are glad to say that this has now been realised and that such a store depôt, with ample supplies to meet demands from medical units of all descriptions, has been established at Basra. But it was not apparently until January, 1916, that the necessity for such a depôt was recognised, and the depôt was not actually opened until March. The arrangements for the supply of medical stores are, however, now satisfactory, and every effort is made to see that stores indented for are despatched to their destination as speedily as possible. Prior to the establishment of this depôt the inconvenience caused to medical units outside Basra, by the delay in the receipt of supplies, was great. It is difficult in ordinary circumstances to foresee many months ahead the exact requirements of a hospital when little is known of the climatic and other conditions; but the hospital authorities in Mesopotamia had other difficulties to contend with in this matter. In the first place, it was impossible for any hospital to foretell the number of patients which it might be called upon to accommodate. A 200-bed hospital might be expanded to 500, or a 600-bed hospital to 1,000. Further, the hospital stores were liable to depletion at any moment to supply advanced medical store depôts and river convoy units, and on occasions even field ambulances. In the second place, it was inconvenient that hospitals up-country, some of which were situated 200 miles up the Tigris, should have no depôt nearer than Bombay upon which to draw for supplies in an emergency. The inconvenience of this system was indeed such that the regulations were not adhered to. On inspection of the advanced medical depôt at Basra we found that, in practice, articles were frequently supplied to the various hospitals there, and the advanced depôt, which should normally have been equipped with 36 boxes of particular articles required for field and regimental medical units, supplied a number of hospitals with various requirements, thereby undertaking duties for which it had neither the requisite staff nor equipment. The attention of the Deputy Director, Medical Services, Mesopotamia, was apparently drawn to this on the 19th July, 1915, for we find that an application was made to the Director of Medical Services, India, for additional personnel for the advanced medical store depôt at Basra, on the ground that the stock of medicines there must be increased. To this demand the Director, Medical Services, India, replied that it would be more satisfactory if frequent and smaller indents for medical stores were made and that no additional personnel could be sanctioned until an increase in the stock was found to be necessary. We draw attention to this correspondence as it indicates, in our opinion, a failure to realise the danger and inconvenience of the system then followed. Surgeon-General Hathaway must have been congizant of the position of affairs and of the delay and inconvenience that constantly occurred in procuring medical supplies. He was also aware, from inspection, of the fact that the advanced depôt was being used in great measure as a general depôt, and that it was undertaking duties for which it was not equipped. He failed, however, to take the opportunity of placing the whole question of medical stores on a sound footing by asking for the establishment of a general medical store depôt at Basra. On the other hand, it appears to us that when the Director of Medical Services, India, criticised the accumulation of any reserve medical stores in Basra, he did not appreciate the importance of having, in Mesopotamia, a large reserve of medical stores from which urgent requirements could be met in time of need. It is only fair, however, to say that the facts were not clearly put to the medical authorities in India, and that the delays and inconvenience which the system then in force entailed, were not fully explained. We cannot but think that if the facts had been properly put, the necessity for doing what has since been done, namely, the establishment of a properly equipped depôt on the spot, would at once have been realised. The fact, however, remains that up to March, 1916, no such depôt was established.

97. Another and possibly a more potent cause of inconvenience in the case of hospitals outside Basra was the difficulty of securing prompt delivery of medical stores up-country. Under present arrangements, when indents are received by the medical store depôt, the articles required are packed for delivery without delay and are made over to the medical embarkation officer, whose duty it is to see that they are despatched to their destination with reasonable expedition. As soon as the indent is complied with, the consignee is advised by wire of the fact, and if delivery is delayed he can at once make inquiries as to the cause, from the authorities at the base. There are a certain number of steamers and barges which return up river at frequent intervals when sick and wounded have been disembarked at the base, and these afford reasonable facilities for the transport of medical stores if the embarkation officer is energetic and intelligent. The consequence is that, as a rule, medical stores are now delivered promptly. But this was not so under the system which prevailed before March, 1916. Throughout the campaign there has been a great shortage of river steamers and, in consequence, all consignments of articles by water have frequently been delayed. The first requirements of an army are food, ammunition, and men to replace casualties, and when there is a deficiency in transport, the despatch of all other articles has to be deferred until these demands have been met. It follows, necessarily, that in such circumstances the despatch of medical stores must be a difficult matter and the utmost vigilance and energy are necessary on the part of the head of the medical services if his demands are not to be overlooked and subordinated to the demands of other administrations. From what we have seen we doubt if the demands of the medical services were pressed with sufficient energy by Surgeon-General Hathaway, and the omission up to January, 1916, to appoint a medical embarkation officer to supervise the despatch of consignments of medical stores, was a serious oversight. Cases of medical stores from the advanced depôt, intended for units in the field, used to be made over to the transport authorities to be conveyed to the front and there the matter ended. Similarly cases from Bombay, consigned to the front, were landed at Basra and presumably made over to the transport authorities, the duty of forwarding these articles to their destinations being left to that agency. In such circumstances, and in the rush to secure space on the steamers, we fear that medical supplies were often neglected to meet the more insistent demands of other administrative services. We freely recognise the efforts made by particular officers of Surgeon-General Hathaway's staff in this matter; but it was clearly impossible for them to attend to this work in the midst of their multifarious other duties. In some cases also we fear that the delay in forwarding consignments was increased by a want of proper organisation. It is not surprising, therefore, that many of the medical officers examined by us have complained of the delay that has occurred in the receipt of medical stores, and we think that much of this inconvenience might have been avoided by the establishment of a general medical store depôt at Basra early in the war, and by the employment of a medical embarkation officer to see that the despatch of consignments up-river was not delayed. It would not, we think, serve any useful purpose to quote instances of inconvenience caused by these delays, though it would not be difficult to do so. It is possible, indeed, that the citation of individual cases in which the delay was due to lack of organisation, might give rise to a more unfavourable impression than the facts warrant. We are content to say that, for the reasons given above, the supply of medical stores to various units in Mesopotamia was, up to recently, far from satisfactory.

98. *Hospital ships.*—Another point to which we draw attention is the question of suitable transport for the conveyance of sick and wounded from Basra to India. When the expeditionary force set out, it was not accompanied by any hospital ship or by any special staff for employment on a transport, in case it should be necessary to use such a vessel as a hospital. There was a certain amount of sickness among the troops on the journey, and the Turks did not surrender possession of the important city of Basra without a struggle. The consequence was that in December, 1914, two ordinary transports had to be used for the evacuation of the sick and wounded to India, the necessary staff and equipment for these vessels being furnished from the limited medical resources of the expeditionary force. In January, 1915, the hospital ship "Madras," which was the gift of a private organisation, was sent to Basra, and in July a second hospital steamer was detailed to assist in the work of evacuating the sick and wounded. Since then, a number of other hospital ships have also been employed for this purpose; but the accommoda-

tion provided has not on all occasions been adequate, for we find that between December, 1914 and May 15th, 1916, over 9,500 sick and wounded travelled by ordinary transports to India. We realise that many of these were probably convalescents who did not need much attention. It is possible also that on some occasions a full medical staff was not necessary; but we cannot think that it was desirable that so many sick and wounded should have been sent back in these vessels. We are confirmed in this view by the evidence recorded at Bombay, which indicates that on particular occasions the staff detailed for these vessels was inadequate, and that the patients arrived in India in a condition which showed that they had not received proper care and attention. Transports not fitted up as hospital ships were used for this purpose on no less than twenty-two occasions, and the depletion of the medical staff and equipment at Basra, in order to furnish the personnel and stores for these vessels, has frequently been, and up to the time of our leaving Mesopotamia still was, a source of trouble and inconvenience. The employment of empty transports for conveying convalescents and light cases to India is, we recognise, probably necessary and open to no objection. In our opinion, however, no serious cases, demanding much medical care, should be placed on vessels of this kind, and we think that if the use of these transports is necessary, the requisite staffs should be drawn from India. Further, many of the hospital ships which have been employed on the Bombay to Basra run, have not been able, at certain seasons, to cross the bar of the Shatt-el-Arab, with the result that patients have had to be taken from Basra to the bar in transports and there transhipped. This transhipment has been the cause of discomfort and inconvenience. On one occasion, at least, the journey to the bar was so prolonged and the equipment of the vessel so inadequate, that the patients suffered considerably on the journey from want of proper food. We are glad, however, to observe that the number of hospital ships now employed is being increased, and that all the vessels which it is intended in the future to use as hospital ships will be able to cross the bar at all seasons.

99. The personnel and equipment provided on the hospital ships is ample and the accommodation is excellent. We have visited a number of these vessels and from our own observation, and the evidence of experts and others, we are satisfied that those now in use are admirably fitted out and that the patients receive the greatest care and attention. Between January, 1915, and May 15th, 1916, about 22,500 patients were, according to a statement furnished to us by the Director, Royal Indian Marine, evacuated to India in these ships and in the most favourable conditions possible.

100. *Water-supply.*—We now turn to the question of water-supply. The water for the troops and hospitals in Basra is drawn from the river, and the position is much the same in regard to places up the Tigris, Euphrates and Karun. It is possible that, at Basra, a better supply of water could be obtained from the new channel of the Euphrates which joins the Shatt-el-Arab at Gurmat Ali, and we understand that a scheme to obtain water from this source is under consideration by the authorities. Generally speaking, however, the only source of water-supply at present is the nearest river, and we are not satisfied that systematic and methodical attempts are made to render this water potable and innocuous before it is used for drinking purposes. This appears to us a matter of great importance in view of the prevalence of colitis and dysentery, and more particularly so owing to the recent outbreak of cholera. We are satisfied that most of the hospitals take great care to purify any water used, by sedimenting and then chlorinating or boiling it; but this is not always the case. The camp at Makina Masus, which is a very few miles from Basra, and incidentally a large Indian general hospital located there, are supplied with water which is not drawn from the middle of the Shatt-el-Arab but is taken from a neighbouring creek. We have the authority of a sanitary specialist for stating that the whole system of water-supply for this camp is unsafe. Further, the arrangements for pumping and sedimenting this water are so inadequate that, on some occasions, the water from the creek (in itself an unsuitable source of water-supply) is not purified in any way before it is used. Similarly, on the river steamers and barges, which are utilized both for the conveyance of troops and the sick, the arrangements for the supply of good drinking water appear to us to be defective. On some of the vessels there are no water tanks. On some the tanks supplied are useless, and on many steamers and barges there are no arrangements for purifying the drinking water that is used by the troops. It is true that in many vessels the energy of particular officers has been sufficient to ensure that reasonable precautions are taken to purify water used for drinking, but in others this is not the case and we cannot but think that this is a source of grave danger.

101. At Amara, we were informed that a scheme for the supply of drinking water was under consideration, but it has not yet materialised. We believe, however, that in the hospitals at Amara every possible precaution is takes to ensure that good drinking water only is supplied to the patients.

102. Generally speaking, we think that if the authorities are satisfied that the water in the various rivers in Mesopotamia can be rendered wholesome and potable by any simple process, systematic steps should be taken for the supply of water so purified to all hospitals as well as to all steamers used for the conveyance of troops, including sick and wounded. If this water cannot be rendered wholesome, the expediency of securing a supply of good water by means of tube wells or some other method should be considered.

103. Water supply arrangements at the actual front were also, until recently, far from satisfactory. The recent outbreak of cholera is attributed by sanitary experts to the failure to supply the troops with a sufficient amount of purified drinking water. It is well known that if the men cannot get an ample supply of good water, they will drink from any source available. The origin of the outbreak has been traced to the water of a ditch on a site previously occupied by Turkish troops among whom the disease was prevalent. The failure to provide a good water supply to the trenches was due to shortage of carts, pumps, tarpaulins and other material for the supply and storage of water, which could not be sent up to the front to begin with, owing to lack of river transport. These defects are now being rectified and the use of motor lorries has greatly facilitated the supply of purified drinking water to the troops.

104. *Sanitation.*—The provision of special sanitary establishments on a liberal scale is very necessary in Mesopotamia and the absence of expert advice on sanitary questions, and of the necessary executive staff to supervise the sanitation of the various camps and hospitals, was, for some time, a source of inconvenience. We understand that the Assistant Director, Medical Services (for Sanitation) has submitted proposals for the employment of the necessary establishment, and we trust that these proposals will receive careful consideration at the hands of the military authorities. It will, however, be of little use to appoint administrative sanitary officers unless the necessary supervising establishment and menial staff is also largely increased. In this connection, we may observe that the lack of sweepers for sanitary work, not only in the different camps but also in the various hospitals and on river steamers, is a serious matter, particularly, since the recent outbreak of cholera. Further, in some cases, men who are not of the proper caste have been sent out with hospitals and sanitary sections as sweepers; in one hospital we were told that out of 39 sweepers, 10 only were men of the class ordinarily employed for conservancy work. We think that a very large addition to the staff of sweepers in Mesopotamia is urgently necessary, and that more care should be taken to ensure that men of the proper caste only are sent for this work. If the terms now offered are not sufficiently attractive, the expediency of employing temporary men on more liberal terms will have to be considered, as the wages now offered are barely adequate according to the rates which prevail in that country.

105. We are glad to say that a serious defect in some of the hospitals, namely the absence of any suitable machinery for disinfecting clothing and other articles, has recently been rectified. A number of Thresh's disinfectors are now available in Mesopotamia, and many of these have been despatched up-river for use in outstations. Formerly, for several months, the lack of this item of equipment was a defect in particular hospitals, as in its absence it was difficult effectively to get rid of lice, either from the Turkish prisoners, or from our own

troops. There was, in consequence, some danger of an outbreak of relapsing or other fever of a similar type. We understand that a proposal to supplement these Thresh's disinfectors by high pressure disinfectors, in places where general hospitals are located, is now being considered. We ought to add, however, that we have no evidence that the lack of disinfectors has been the cause of any serious outbreak of illness

106. *Effect of economy on the medical organisation.*— We now propose to refer to the widespread feeling in Mesopotamia that these deficiencies in the medical organisation are due to the parsimony of the Government of India and particularly to the action of the Finance Department. It is only fair to state that no evidence has been adduced before us of any demand made on the Finance Department, during the progress of the campaign, having been refused. The Government of India have also the less interest in cutting down expenditure, because the cost of the campaign, *minus* the normal charges of the troops furnished from India, is being paid by the Imperial Government.

107. The discussion of this point naturally leads to an examination of the larger question as to how far the rigid economy which has been exercised in respect of military expenditure in India for many years has affected the medical organisation of the Army in India. Any inquiry into the general question of military expenditure is clearly beyond the scope of our terms of reference; but the question as to whether, and to what extent this policy has affected medical arrangements in Mesopotamia is directly relevant, and there are strong indications of its prejudicial effect upon this organisation. It has, indeed, been freely suggested that this spirit of economy has been so inculcated into the minds of administrative officers, that economy has come to be regarded by many as the test of good administration, even at the expense of efficiency. Such an impression cannot but be destructive of initiative and of any desire to improve conditions in time of peace, while in war it is productive of graver evils. The observations of a senior officer who has given evidence to the Commission, may be quoted with advantage in this connection, as they crystallize the views of many others.

This officer writes as follows in an annexure to his evidence. "In my opinion the Indian system is more to blame for the breakdown of the Mesopotamia medical arrangements than anything else- a system which allows officers to think, whether rightly or wrongly —

(*a*) That there is more merit to be obtained by keeping quiet and not worrying the higher authorities than by asking for what is necessary;

(*b*) That keeping down expenditure is more meritorious than efficiency;

(*c*) That nothing new is likely to be sanctioned unless a corresponding saving in something else can be shown; and

(*d*) That even in small matters anything asked for will be cut down by half. . . . A system of this nature will possibly be good and economical in peace time, but is bound to break down in war."

There is, in our opinion, much force in this criticism, and though we do not accept this statement in its entirety, we are inclined to ascribe much of the delay in applying for, and the reluctance to insist on the provision of, separate river hospital steamers, proper ambulance land transport, electric fans, ice machines and other essential requirements, to this cause.

108. It might also be argued that the general unpreparedness of the medical organisation in India to meet the requirements of a great campaign overseas, is partly due to this spirit and to the reluctance of the Government of India to provide the necessary funds for improving the medical services. It would, however, be unjust to ascribe this lack of preparation entirely to these causes, for it may in great measure be due to the fact that the Army in India has, in the present war, been employed to an extent and in a manner not foreseen. Any discussion of this subject would, however, lead us beyond the scope of our reference. Whatever may be the cause, the inadequacy of the organisation to meet such demands is apparent. Not only has the supply of personnel and equipment proved insufficient to maintain medical establishments on the normal scale, but it may be doubted whether that scale itself is adequate to meet the requirements of a force engaged on a campaign against a well-armed enemy and serving in unhealthy surroundings. The Commission has, indeed, been led to the conclusion that the present situation has arisen in great measure because a system, framed in contemplation of an expedition in a mountainous country on the frontiers of India, has been applied, without the necessary modifications, to the very different circumstances of an important river campaign overseas. The methods prescribed for the supply of medical stores, the absence of any provision for the evacuation of wounded by river, and the insufficiency of the reserves of medical and subordinate personnel, may be cited in support of this contention. If this view is correct, it follows that the medical organisation of the Army in India will have to be re-examined and revised at the conclusion of the war. The personnel of officers, subordinates and menials will have to be largely increased and the system by which medical officers nominally in military service are allowed to remain in civil employment so long that they lose all touch with military work, will have to be reconsidered. The substitution of station for regimental hospitals in the Indian Army, so that patients may become accustomed in peace time to the non-regimental system of hospital organisation which obtains in war, is another proposal which will require examination. It has been suggested that such a change would have the additional advantage of improving the technical training of officers of the Indian Medical Service in military employment, by giving them more responsibility and wider administrative experience than is afforded by the charge of a regimental hospital during the greater part of their careers. The equipment also of the various units will have to be improved and added to, and ample reserves of medical requirements will have to be provided in India, for use in case of need. It is for various reasons impossible for us to examine this question in detail, nor would such an examination be germane to the subject of our inquiry; but we are, we think, justified in expressing the view that in this revision the following important points will have to be considered, *viz.*: —

(1) The increase in the number of casualties in modern warfare as compared with previous experiences in India;

(2) The inability of India to furnish or procure, in an emergency, any great increase either in medical personnel or equipment without delay;

(3) The expediency of assimilating the Indian and British medical organisations. The existing differences in establishments, equipment and divisibility of the various medical units, are productive of administrative inconvenience;

(4) The probability of Indian troops being employed in considerable numbers overseas; and

(5) The fact that public opinion now demands a very much higher standard of efficiency in medical organisation than formerly.

We do not doubt that in previous campaigns, notably in the campaign in South Africa and the Indian frontier expedition of 1908, the wounded suffered much from defective medical arrangements, and we believe that in the Soudan expedition no specially equipped hospital steamers were provided for the evacuation of the wounded down the Nile. But a very different standard is now rightly demanded by modern public opinion, and, to be satisfactory, any revision of the Indian organisation will have to be thoroughly up to date and complete, and at the same time sufficiently elastic to allow the fullest advantage to be taken of new discoveries and advances in medical science.

109. We are bound to add, however, that no perfection of organisation would allow of the reproduction, in Mesopotamia, of the admirable arrangements for the evacuation of the wounded which now obtain in France. Campaigning in a civilised country possessing great resources and an excellent system of railways, canals and roads, cannot be compared with campaigning in Mesopotamia, where everything required by the troops has to be imported either from England or India, and then carried for 250 miles or more, up a tortuous river which for difficulty of navigation must have few equals. In France there is an abundance of good buildings which can be used for the accommodation of the sick and the housing of the troops. In Mesopotamia, with the exception of the General

Hospitals at Basra and Amara, which are partly located in buildings, both the sick and the troops have as a rule to be accommodated in tents or mat huts, in a country where variations of temperature make the climate extremely trying. We have no desire to minimise the errors and omissions referred to in this report, but we are not unmindful of the fact that many of the complaints made by officers in regard to the hardships of service in Mesopotamia, are partly due to the unfavourable comparisons which they draw between their present surroundings and those which they enjoyed in France. They miss the spells of rest in billets which followed turns of duty in the trenches, and many find it hard to realise that conditions of life which are possible in Europe, even in war time, are not possible for soldiers campaigning in the East, in circumstances of unusual difficulty.

110. In referring to the defects attributable to a faulty system, we do not wish to create the impression that these defects are alone responsible for the breakdown in the medical arrangements, for there is abundant evidence that inertia, want of foresight and lack of co-ordination, have been important factors in the situation. We have already referred, and shall have occasion to refer again, to the first two of these factors, but it will be convenient here to discuss the question of co-ordination. It is laid down in the Field Service Regulations that the General Staff is responsible that, with due regard to secrecy, constant and accurate information as to the situation and probable requirements of the troops is furnished to the other branches of the staff in sufficient time to enable these requirements to be met. We doubt whether sufficient attention was paid to this rule in certain phases of the campaign. Complaint was made to Sir John Nixon that the secretiveness of his General Staff was causing inconvenience to the administrative services. Conferences were held at headquarters from time to time, at which plans were considered. It is stated, however, that Surgeon-General Hathaway did not attend these conferences, except when the subjects discussed related directly to the medical administration. He was thus less in touch with the general situation than other Heads of Administrative Services, and we think that this had an unfavourable influence on the working of his branch.

111. There is reason to believe that the lack of co-ordination arising from the secretiveness referred to, and other causes, attracted the attention of the authorities in India, as we find that on December 24th, 1915, the Chief of the General Staff, India, made special enquiries of Sir John Nixon as to whether he was satisfied that his General Staff was in sufficiently close touch with the Medical Services to ensure that the latter knew when extra demands were likely to be made on them. Sir John Nixon replied that he was "perfectly satisfied." We regret that we cannot endorse this view, as there is evidence that on this and on other occasions the want of co-ordination and co-operation between the different branches of the staff, particularly between the Inspector-General of Communications and the medical services, was the source of great inconvenience.

112. *Landing at Fao and battle of Sahil.* Having discussed these general points, we proceed to examine the manner in which the deficiencies referred to, and others of a temporary and local character, have affected the various stages of the operations, beginning with the landing at Fao. We think that, in regard to the early part of the campaign, it will meet all reasonable requirements if the operations up to and including the occupation of Basra are considered together. The casualties at the landing at Fao and in the two subsequent engagements were small, and the collection of the wounded presented no serious difficulty. It was not until the battle of Sahil that real opposition was encountered. The number of field ambulances landed was sufficient to deal with the casualties, which aggregated about 500. The intention was to remove the wounded as soon as possible to the river bank and place them on shipboard. During the progress of the battle, however, a violent sand-storm occurred which rendered this impossible. The result was that the bearer sub-divisions of the field ambulances, having brought their patients to the river bank by evening, had to improvise such shelter as was possible for them in date palm groves, and there was some difficulty in procuring suitable food. Colonel Jennings, I.M.S., who was in command of a field ambulance and had remained with the headquarters of his unit, was unable to get to the river bank that night owing to want of stretchers. He, therefore, remained out in the open with 30 patients, making such arrangements as he could for feeding and sheltering them. The next day all the wounded were removed to a transport in the river. It must be admitted that the wounded on this occasion suffered some discomfort, and that it would have been better if tents and supplies had been forthcoming on the river bank. We think, however, that the discomfort was not very serious, being due rather to unavoidable weather conditions than to any defect in the arrangements, and we consider that in the circumstances the evacuation of the wounded was satisfactory. It was unfortunate that Colonel Jennings was left out with his patients, but he was under the protection of the rear-guard, and we are informed that search parties were sent out to find him, though, owing to the violence of the dust-storm, they failed to do so.

113. The arrangements for receiving the wounded on shipboard were, however, not satisfactory. The absence of any properly equipped hospital ship was at once felt, and transports, which were not suitable, had to be converted into temporary hospital ships. One of these steamers was the "Varela," another being the "Erinpura." We have evidence that the "Varela" was in no way suitable for the accommodation of sick and wounded. She had animals on board, and was also loaded with ammunition, which she was discharging from time to time, while she was being used as a hospital ship. We cannot, therefore, but regret that a regular hospital ship was not sent out with the force, or that some more suitable vessel was not prepared for the reception of the sick and wounded. There does not appear to us to have been, at this stage, any real deficiency of medical personnel or equipment. It has been stated that there was a shortage of chloroform, but we do not think that this is proved. It is true that a box which was part of the equipment of the British General Hospital, supposed to contain a supply of chloroform, was found to be empty; but we have clear evidence that sufficient supplies of this drug were available from other sources.

114. Immediately after the action it was decided to send back all serious cases of sick and wounded, of which the number was now considerable, to India. The transport "Erinpura" was used for this purpose—a mixed convoy of 224 British and Indians being despatched in her to Bombay. We have no reason to think that the medical staff and equipment for this vessel were actually insufficient, though they were apparently only just adequate; but the inconvenience consequent on the lack of a proper hospital ship, with separate personnel and equipment, was apparent. In the first place the medical staff of the expedition had to be depleted to furnish the necessary medical personnel for the ship. In the second place, it is difficult—indeed almost impossible—to treat a large number of serious cases properly on a transport which has not the conveniences and appliances of a regular hospital. Thirdly, the equipment had to be improvised out of the stores provided for the force. We do not think that it is safe in such circumstances to depend entirely on improvised equipment, as many articles which are necessary may be overlooked.

115. *Occupation of Basra.*—The medical arrangements during the occupation of Basra call for very little remark. On the arrival of the troops the Sheikh of Mohammerah's palace was taken over and prepared as a hospital, and shortly afterwards the British General Hospital took possession of it. It is a suitable building for the purpose, and during this period of the operations the personnel and equipment were adequate. Some complaints have been made as to the quantity and quality of the food supplied to the patients. We admit that there may, for a short time, have been some discomfort owing to the inevitable difficulties of establishing a new hospital in a city which had only just been occupied. We do not think, however, that there was much ground for complaint, and from what we have seen and heard, we are of opinion that the officers of the hospital, both then and throughout the campaign, have spared no effort to secure the maximum of comfort for the sick and wounded in their charge.

116. *Occupation of Kurna.*—In December, 1914, the operations were confined to the actions at Muzaibila and

the capture of Kurna. In these engagements the wounded numbered under 200, and the medical arrangements appear to have been generally adequate, the only serious defect being the lack of river hospital steamers to which reference has already been made. Owing to the climatic conditions during this season of the year, and the shortness of the journey, the discomfort thus caused was insignificant compared with the sufferings in later stages of the campaign.

117. The general hospitals at Basra were not overcrowded from December to March. The personnel and equipment were ample, and the food supplied, though not ideal, was the best procurable.

118. *Operations round Ahwaz.*—The next phase in the campaign to be considered is the operations up the Karun river, which began with the despatch in February of a small column under General Robinson to Ahwaz. This force, according to the evidence given to us, was accompanied by the bearer sub-division of a section of a field ambulance, and one section of a clearing hospital with four 160-lb. tents. The arrangements for the collection and evacuation of the wounded in the engagement of March 3rd cannot be said to have been satisfactory. No field ambulance establishment, as far as we have been able to ascertain, accompanied the column from Ahwaz to the battlefield, and the regiments engaged depended entirely on their own medical officers and stretcher-bearers. During the retreat, which was of a somewhat hurried character, a number of the severely wounded had to be abandoned, and there is little doubt but that they fell into the hands of hostile Arabs. Some wagons of the Anglo-Persian Oil Company, which had been commandeered, were taken out for the transport of the wounded back to Ahwaz; but the Persian drivers fled when the action began, and the carts were by some mistake driven into a nullah from which the mules could not be extricated. In consequence these vehicles could not be used for the purpose for which they had been taken out. The number of stretchers available was very limited and many of these were abandoned, so that of the seriously wounded a few only got back to camp. Those who reached Ahwaz were treated by the medical units there, and no complaints as to the arrangements at this period have been made to us. In the circumstances we think that the want of success in evacuating the wounded was due more to military reasons than to any defect in the medical arrangements.

119. During the subsequent operations of General Gorringe up the Karun and Kharkeh rivers, and during the march from Illah to Amara, which have already been described, the arrangements for the treatment of the sick and wounded were not, in our opinion, as good as they might have been. The medical establishment with the force was two field ambulances *plus* two sections of a cavalry field ambulance and part of a clearing hospital. During the march to Amara one field ambulance and the clearing hospital remained at Ahwaz, and four sections of a field ambulance were posted at Illah. One British and one Indian section of a field ambulance marched with General Gorringe's force to Amara. The number of wounded, either at Illah or elsewhere, was very small, but there was a good deal of sickness during the operations and the medical arrangements, though possibly the best that were feasible, were not satisfactory in some respects. The field ambulance at Illah was used as a stationary hospital, and with accommodation for 100 patients had to treat as many as 250 on one occasion. The hospital and field ambulance at Ahwaz were also overcrowded. The field ambulance at Ahwaz, according to the evidence, had to treat from May 27th up to the first week in August an average of 375 patients, British and Indian, daily. Indeed these operations illustrate very clearly the dislocation in the medical organisation to which we have already referred in criticising the general arrangements. The difficulties of the medical services were further increased, as the personnel was from time to time depleted by the detailing of officers and men for convoy duty, and by sickness and other causes. Nor was the accommodation provided for all the patients suitable. In Ahwaz, for a part of the time, the patients of the clearing hospital were accommodated in dug-outs and in the house of a local Sheikh, but a number of sick both at Ahwaz and at Illah were housed in single fly tents of 160 lbs. which are not, and cannot be rendered, suitable for sick persons in a temperature of 125 degrees. The discomfort of the patients was increased by a plague of flies, and at Illah and at other places by a lack of ice. From time to time the supply of medical comforts was barely sufficient. In these circumstances it is not surprising that the sick suffered considerably, but there is no evidence that the mortality among them was high or that this discomfort led to any fatal results.

120. In the march to Amara the amount of land transport supplied for medical purposes was inadequate. Up to Bisaitin the wounded of the column, which moved on one bank of the river, were apparently evacuated to Ahwaz via Illah in motor cars and transport carts, and if more motor cars had been available the use of transport carts would not have been necessary. For the column on the other side of the river an insufficient number of riding mules formed the only ambulance transport. From Bisaitin on to Amara the wounded were carried forward with the column in transport carts; the temperature was very high, and the patients suffered much from heatstroke. Owing to sickness among the transport ponies there was occasional difficulty in securing even transport carts for the sick. Fortunately the force met with little or no opposition from the Turks on its march, or the consequences might have been serious.

121. For the evacuation of patients from Ahwaz to Basra ordinary river steamers were used, and the general criticism of the use of this form of transport applies to this period of the campaign, though the patients were better off than those in the large convoys which came down the Tigris later. The evacuation from Ahwaz was, however, sometimes delayed because the medical staff at Ahwaz and Illah was so small that it was not always possible to find the necessary personnel for the steamers as promptly as was desirable.

122. Recently, the force in occupation of Ahwaz has been very small. There is nothing to lead us to think that the medical arangements do not work satisfactorily, though it would be more in accordance with the normal organisation if a small stationary hospital were located there. The lack, however, of proper land and water transport might at any time be a source of trouble.

123. *Battle of Shaiba or Barjasiyah.*—The medical arrangements for the battle of Shaiba were generally satisfactory, though the field units which accompanied the force must have been pressed very severely, having regard to the number of casualties. The medical units accompanying the force consisted of No. 2 Combined Field Ambulance, half of No. 3 Combined Field Ambulance, a portion of a Cavalry Field Ambulance, and No. 57 Stationary Hospital. The total number of wounded was approximately 1,100, but the casualties, though they occurred mainly in the last day's fighting, were distributed over several days. For unavoidable reasons the evacuation of some of the wounded to Basra was delayed, but according to the evidence before us they were all properly fed and attended to immediately after the action. Much of the country between Basra and Shaiba was at this time under water, and the evacuation was effected in very unfavourable conditions, as part of the journey had to be done by land and part by water. For the first part of the journey stretchers and transport carts were employed, and although the suffering caused by these carts must have been considerable, we doubt whether in the circumstances motor ambulances, or indeed any form of wheeled ambulance transport, could have been used. A clearing station was located at the point where the journey by water began. The wounded were fed and examined at this station, the wounds of such as required attention being re-dressed. They were then sent on in specially prepared *bellums* to the Zobeir Gate, the boat cushions being used as mattresses for lying down cases. No other form of conveyance could have been used, unless special motor boats of very shallow draught had been provided. At the Zobeir Gate the wounded were again fed and tended by the officers of No. 19 Clearing Hospital. They were then despatched either direct to the hospitals, or carried in motors and transport carts to a steamer which conveyed them to the General Hospitals at Basra. It has been suggested that there was, even at this stage of the campaign, a breakdown in the medical arrangements, and it has been said in particular that the Turkish wounded captured in the engagement did not receive prompt and proper attention. We are not pre-

pared to accept either of these contentions as correct. There was no doubt a shortage of medical personnel and some delay in treating such a large number of wounded, but much of the discomfort and suffering was of a kind that is unavoidable after a severe action. The arrangements made were well-considered and methodical, and considering the difficulties worked well, every effort being made to expedite the journey from Shaiba to Basra and to render the patients as comfortable as possible. We do not doubt that certain of the Turkish prisoners arrived at Basra in a bad state, but we cannot accept the view that this was caused by any neglect on the part of the British medical officers. We think that more probably their condition was due to the time which elapsed between the date on which they were wounded and the date on which they were captured, and to the inefficiency and callousness of the Turkish doctors, of which we have had ample evidence in the course of our enquiry. The evidence indeed indicates that throughout the campaign the Turkish wounded have been treated by our officers with the same consideration as our own.

124. At this period of the campaign the hospitals at Basra were crowded; but, as we have already stated in a previous part of this report, we are satisfied that the authorities made every effort, in spite of the large number of casualties, to treat their patients promptly and effectively. On the whole we think that in very unfavourable circumstances the medical arrangements during this phase were satisfactory.

125. *Battle of Nasariyeh.*—During the operations of General Gorringe up the Euphrates, the medical arrangements were in our opinion deficient. The medical units which accompanied the force did not include either clearing or stationary hospitals, and were insufficient to deal promptly or satisfactorily with the large numbers of sick and wounded. In the second place, no river hospital steamer accompanied the force, with the result that after the first engagement at Gurma Safha the wounded had to be accommodated on the "Mejidieh" which was at that time being used as a gun boat, and was in action and under shell fire. Less suitable accommodation for sick and wounded it would be difficult to conceive, although this was not the first time that this steamer had served this double purpose. The wounded were shortly afterwards evacuated in an ordinary river steamer to Basra. After the action of July 14th the wounded were collected successfully, though with great difficulty, by nightfall. They were accommodated in a field ambulance and were evacuated the next day, in a convoy, in charge of a medical officer. The evidence as to the number of patients in this convoy is not very consistent, but we have definite proof that the available staff could not cope with the work, that many of the wounds became septic, and that a certain number of the patients did not receive sufficient attention. The evidence of the officers at the base, who received the patients from Nasariyeh, also supports this statement; indeed it has been freely said that many of the sick who arrived from these operations up the Euphrates came to the hospitals in a very bad state. On July 24th conditions were still worse. The force by this time had been increased to three brigades and the whole medical staff, according to the evidence, was nine field ambulance sections, equipped to deal with 225 cases. During the action, the bearer sub-divisions of these ambulances were sent out to the front, and at their headquarters two medical officers only were left, with either one or two medical subordinates, to treat all the sick and wounded, numbering about 1,000. The accommodation for the reception of the wounded was insufficient, and it was not until the 25th that they were all placed under shelter. There was, for some time, a lack of food, and it was manifestly impossible for the available staff to treat this number of patients with proper care. There is a consensus of evidence that for some time after this action the wounded underwent considerable suffering and discomfort. As soon as the troops occupied Nasariyeh, the patients were removed there. Conditions immediately improved, and the arrangements for the comfort of patients were better organised; but we feel bound to say that, prior to this the arrangements were inadequate. We are satisfied that the officers on the spot did all that was possible to prevent suffering and to promote the comfort of their patients, but the fact is that the medical staff, the accommodation, and the supply of comforts, were alike insufficient. The wounded in this action were evacuated to the base in ordinary river steamers, with improvised medical personnel and equipment. The general objection to this use of these steamers has already been explained, and the evidence as to the condition of many of the patients, when they reached Basra, supports our criticism on the point.

126. There was no serious engagement on the Euphrates between July and February, and the medical staff at Nasariyeh, from July, 1915, onward, dealt mainly with medical cases only. These were accommodated in field ambulances, and the position here again illustrates the dislocation, with its corollary of discomfort to the patients, which the want of a sufficient number of hospitals in Mesopotamia has entailed. When we visited Nasariyeh in April, we thought it right to address the Director of Medical Services, Mesopotamia, on the necessity of sending a stationary or at least a clearing hospital, to Nasariyeh. We have been informed that orders for the despatch of a stationary hospital have been issued, but on the occasion of our visit the position was this, that if the force there had been seriously engaged, the field ambulances would have had not only to deal with the wounded in the field, but also to provide personnel and equipment for their treatment in hospitals. We do not think that they could have performed these double duties satisfactorily.

127. Since the Hammar Lake fell last year *bellums* have been the only means for evacuating the sick and wounded from Nasariyeh. As has already been stated, we found it necessary to write to the medical authorities on this subject, and we have reason to believe that in future a river hospital steamer will visit Nasariyeh at regular intervals. We have already commented on the hardships caused by the evacuation of the sick and wounded in country boats. We need only say further, that it is a matter for regret that it was not found possible to provide some more suitable craft for this purpose. We are aware that the difficulty of crossing the Hammar Lake in certain seasons of the year is very great, but even accepting this, we do not see why, at least below the Hammar Lake, some more suitable form of water transport should not have been provided.

128. *Advance on Amara.*—During the advance from Kurna to Amara, the actual arrangements in the field for the collection of the wounded were highly successful. The medical units accompanied the force on *bellums* and rafts, and as soon as the Turkish positions were captured, some of these units established themselves on land and, without delay, treated not only the British, but also the Turkish wounded. For the collection of the wounded from the different creeks, large covered-in *mahailas* of light draught were specially prepared. The personnel was sufficient, and the equipment, which included some equipment captured from the enemy, was ample. The casualties were not numerous and the collection and treatment of the wounded was effected methodically and well. For the evacuation of the wounded, a river steamer was fitted up with improvised beds and a supply of medical stores and comforts. Though we consider that a properly equipped hospital steamer was needed on this occasion, we think that the local arrangements made were the best feasible. The great want at this time was ice. A certain quantity was sent up twice a week from Basra to Kurna, but it was not sufficient for the needs of the sick, many of whom were suffering from heat stroke.

129. When the force reached Ezra's Tomb, though the sick and wounded were at once accommodated in the coolest place possible, the discomfort and suffering caused by the want of ice continued and was the more felt owing to the prevalence of heat stroke, some cases of which proved fatal. It is, in our opinion, a matter for regret that steps were not taken to ensure a sufficient supply of ice being provided for the sick. There was also a deficiency in supplies of milk, beef essence and other medical comforts. At Amarah which was reached on June 4th, the condition of affairs was worse. No clearing hospital accompanied the force, and the sick had all to be accommodated in field ambulances which were much overcrowded. Ice was not procurable until June 21st, and, according to the evidence before us, the supply shortly afterwards failed. There was, if we are to accept the evidence given to us, a shortage of drugs, including castor oil, Epsom salts, emetine and quinine, and the supply of medical comforts

and of limejuice and fresh vegetables was deficient. It has, indeed, been suggested that it was only when a medical officer attached to the force wrote to Simla, representing the facts, that a supply of medical comforts was received. Colonel Hehir, I.M.S., Assistant Director, Medical Services, 6th Division, has not been examined by us though we have studied his war diaries, and the facts stated above have been obtained from other sources. We are satisfied that owing to the heat, the want of ice and of proper hospital accommodation, medical comforts and drugs, the sick and wounded suffered considerable hardships during this part of the campaign.

130. *Battle of Es Sinn and capture of Kut-el-Amara.* - The next phase of the operations is that which terminated with the battle of Es Sinn on September 28th. We regret that we have to conclude that in this action also the medical arrangements were not satisfactory. The medical staff available for the treatment of the sick and wounded was below the normal scale and consisted of 14 field ambulance sections as against 20 sections, and 2 sections of a clearing hospital instead of 4 sections. For the transport of wounded by land, two motor cars only were available, and for the great majority, transport carts had to suffice, causing the usual suffering necessarily attendant upon their employment. We have it, on Sir John Nixon's authority, that the supply of these carts for ambulance purposes was, owing to bad staff work, insufficient for some time. There were, as on previous occasions, no river hospital steamers, and there is evidence that the patients, who were evacuated by ordinary river craft, suffered considerable discomfort. The Turks made a counter-attack on the evening of the 28th, which resulted in the estimated casualties being largely exceeded. For these reasons the collection and treatment of the wounded was delayed, and some left out at night were robbed and wounded by Arabs. The field ambulances were overcrowded—one field ambulance having to deal with at least 500 patients. The supply of blankets and food in the field ambulances was short. We may mention that the defects observed on this occasion, particularly in the collection of the wounded, were sharply criticised by the Army Commander. It appears also that the discomfort necessarily attendant on a journey of some days in a vessel not suited for hospital work and ill-equipped in the way of personnel, medical appliances, stores and comforts, was in some cases accentuated by a delay in starting. One steamer, the "P. 4," did not apparently leave the front until October 3rd. Although the hardships endured on this occasion were no doubt considerable, we do not think that they were nearly as severe as in later actions.

131. *Battle of Ctesiphon.*—It has been impossible, in the absence of Colonel Hehir, A.D.M.S., and other officers of the 6th Division, to obtain anything like complete evidence as to the arrangements made for the collection and evacuation of the wounded from the battle of Ctesiphon; but we have on record abundant proof that these arrangements proved defective and were the cause of great suffering. We are aware that Sir John Nixon, in a telegram dated December 7th, 1915, stated that the "medical arrangements, under circumstances of considerable difficulty, worked splendidly." We regret that we are unable to concur in the views of that distinguished officer. It is true that the medical officers on the spot displayed the greatest resource and energy in the discharge of their duty, and we have overwhelming evidence of their unceasing efforts to alleviate the sufferings of the wounded. We admit also, that the difficulties of evacuating a large number of wounded, after a reverse, followed by a retirement through a country infested with hostile Arabs, who did not hesitate to attack convoys of sick and wounded, were very great; but in the face of the evidence on record of the sufferings of the wounded on this occasion, and of the breakdown of the medical organisation, we do not think that it can be said that the medical arrangements "worked splendidly."

132. In the first place, the evidence proves that the casualties, were, in fact, heavily under-estimated, that the medical establishment available on this occasion was inadequate to meet the demands made on it, and that the arrangements made for collecting the wounded on the battlefield, and accommodating them pending evacuation to the river bank, were far from satisfactory. It was very difficult for wounded men to ascertain where they had to go for medical aid, and when field ambulances and collecting stations were found, the supply of food, tents, blankets, hot water and any kind of comfort was insufficient. Further, owing to the shortage of medical personnel, many of the patients both in the field ambulances near the battlefield and at the encampments by the river bank, did not receive proper treatment. There was some delay in evacuating the wounded to Laj, where the steamers to convey them to the base were moored, and it was not until the 25th that the last of the wounded were removed to this spot. In the meantime, many suffered from exposure, want of food and inadequate attention. On the morning of the 23rd, there was a violent dust storm which increased their discomfort, and to make matters worse the largest of the collecting stations, which was located at a place already referred to and known as "Vital Point," was under heavy shell fire for some time during a counter attack by the Turks.

133. In the second place, save for two motor ambulances which were employed with great success, no proper ambulance land transport was provided for the removal of the wounded to the river bank. There were a number of steamers at Laj, some 8 or 9 miles from the battlefield, two only of which, however, had been in any way prepared for the reception of the sick. Many of the wounded were, it is true, able to walk or ride to the river bank, but for the conveyance of stretcher cases the two motors already mentioned, and ordinary transport carts, alone were available. We have already criticised the use of these carts for ambulance purposes and we only wish to add that on this occasion it was productive of intense pain and suffering. We are aware that it is not possible to provide proper ambulance transport for all the wounded on such occasions, but we do feel very strongly that for all serious stretcher cases, more especially for cases of fracture, proper land ambulance transport is essential.

134. Thirdly, the lack of properly equipped river hospital steamers proved, as may be well understood, in the circumstances, disastrous. In the absence of any such steamers some attempt was made to equip the "Blosse Lynch" and the "Mosul" for the evacuation of sick and wounded to the base. These two steamers were, however, only made over to the medical officers at the last moment on the journey up, when it was impossible to fit them out properly. They were already partly filled with 500 sick and wounded who, owing to the shortage in river transport, had not been evacuated to the base before the battle, in accordance with normal practice. The number of wounded at Ctesiphon was 3,852 and the accommodation, such as it was, which these two steamers afforded, was insufficient for a fraction of that number. The result was that as soon as they were filled with patients, the remainder of the wounded had to be crowded on to other river steamers which had not been prepared in any way for the reception of sick and wounded, and many of which, indeed, were not fit for passenger traffic according to ordinary standards. The medical and subordinate personnel for these steamers, which was taken from field ambulances, was inadequate for the number of the patients. The supply of medical stores and appliances and even of food was in some cases insufficient. The arrangements for cooking the food were defective and the personnel to distribute it was wanting. The arrangements for water supply were unsatisfactory, the latrine accommodation was insufficient, and there were not enough sweepers and bed pans for the necessities of those patients who could not struggle to the latrines. Finally, the wounded were huddled together as close as they could be packed on the decks, without beds or mattresses, and it was almost impossible for the medical officers to attend to them properly. In some cases the vessels had, moreover, been used for the carriage of animals and it was impossible, in the time available, to clean and disinfect them. As might be expected, the suffering and discomfort caused by a long journey in such conditions were, despite the untiring efforts of the medical officers and others on board, in many cases great, and we cannot doubt that the recovery of some patients was retarded by the hardships experienced and that the chances of complete recovery in others were prejudiced. The conditions varied on different steamers, as some were better equipped than others and carried fewer patients. On some vessels the proportion of slightly wounded, who were able to assist their less fortunate comrades, was larger than in others, and the

discomfort resulting from the lack of attendance was less felt. On one steamer, indeed, the arrrangements made were fairly good, and the number of patients was so small that there was little ground for complaint. It is right also to state that on arrival at Kut and again at Amara, all possible efforts were made to feed, dress and tend the patients, and that some of them were either landed *en route*, or transhipped to other steamers which were less crowded and better equipped.

Nevertheless, the evidence of the medical officers and of the wounded who formed part of these convoys, and of others who saw from time to time what the condition of affairs was, has satisfied us that on several of these steamers the patients suffered from cold, hunger, thirst and want of care. Wounds which required dressing and re-dressing were not attended to, and the condition of many of the patients who travelled by these steamers was, when they reached Basra, deplorable. There the wounds of many were found to be in a septic condition and in urgent need of re-dressing. In some cases bed sores had developed, more than one patient arrived soaked in fæces and urine, and in a few cases wounds were found to contain maggots. These are the facts upon which, differing from Sir John Nixon, we find that the medical arrangements were lamentably defective. While, however, we think it our duty to criticise these arrangements, we freely admit that the difficulties of the situation were such that the evacuation of the wounded at all was a great achievement, for which the military and medical authorities in the field deserve very great credit.

135. *Operations for the relief of Kut in January.*—We now come to a period when the breakdown in the medical arrangements of the campaign was more marked than at any other time. The military situation and the reasons which, in the opinion of those best qualified to judge, rendered an immediate advance to the relief of Kut necessary, have already been explained, and it remains only to examine the medical arrangements for these operations. In January, 1916, when the order to advance was given the total strength of the expeditionary force in Mesopotamia, excluding the division besieged in Kut, was approximately 51,000 men. Throughout the year various reinforcements had been sent out, and in December and January two new divisions arrived from France. The medical establishment of the force was, as has already been shown, insufficient before the arrival of these two divisions, and this deficiency was accentuated by the fact that they were despatched from France in advance of their medical units. On January 3rd, when the force marched from Ali-al-Gharbi, no part of the medical establishments of these divisions was available for service at the front. It may also be added that when these units did arrive, their personnel, equipment and transport were found to have been sent on different ships, and it was impossible to get them despatched immediately to the front, as all the river transport was needed for more urgent purposes. When, therefore, General Aylmer concentrated at Ali-al-Gharbi, his only possible course was to improvise medical units out of the resources available, and for this purpose all the personnel and equipment that could be collected was employed. By strenuous efforts seven field ambulance sections were thus provided for the 7th Division, upon which the brunt of the fighting fell. Eight sections were allotted to the corps troops and two sections of a clearing hospital were placed on the "Julnar," which was to receive the wounded. Many of these units were, however, deficient in personnel and equipment, nor was the subordinate establishment composed entirely of properly trained persons. To make up deficiencies in equipment the hospitals were depleted of any material they could spare, purchases were made locally of cloth and muslin for bandages, and we are informed that sheets and tablecloths were collected to be used in case of necessity. Orders had been issued by the Director of Medical Services, Mesopotamia, that a consignment of medical accessories, then lying at Basrah and intended for the advanced medical depôt at Kut, should be forwarded to Ali-al-Gharbi for use in case of need. By a series of unfortunate mistakes this supply was not sent on by steamer in accordance with the orders issued, but was despatched by *mahaila* and arrived too late for the earlier actions. The omission to forward this consignment, the lack of which was severely felt, was the subject of a court of enquiry, and the officers responsible for the failure to carry out orders were censured by the Army Commander. With such deficiencies in medical establishments and equipment, it was not to be expected that the arrangements for the treatment of the wounded could be very satisfactory, even in a successful engagement with few casualties. The resistance offered by the Turkish force was, however, more strenuous and the casualties were far more numerous than had been anticipated. The medical staff was entirely unable to cope with the number of patients, and drugs and dressings ran short. On the 7th, when large numbers of wounded began to come in, there was not room for all of them on the "Julnar," or in the few tents which had been pitched for their reception. In consequence, the great majority had to lie out all night on the river bank without shelter, or sufficient clothing, food, or medical attendance. On the 8th more tents were pitched, mainly by the efforts of officers who were not responsible for the medical arrangements, and some organised effort was made to afford the necessary medical relief. For some time, however, there was a great want of organisation, the supply personnel was less than a quarter of its proper strength, and the unfortunate sick and wounded appear to have been in great measure dependant on their regiments and on the kindness of officers not attached to the medical services, both for shelter and food. We have every reason to know that many of the executive medical officers on this occasion, as indeed throughout the campaign, worked unremittingly to do what was possible for the relief of their patients; but both on the "Julnar" and on the river bank the latter appear to have suffered very greatly from want of food, shelter, and medical treatment. While this result was mainly due to shortage of staff and equipment, we consider that much of it might have been avoided if the medical administrative officers had been more prompt and resourceful in utilising available material. We refer in particular to conditions on the left bank of the river. On the right bank, though the field ambulances were much overcrowded, the organisation was better and more systematic, and every effort was made to do all that was humanly possible. We are not satisfied, however, that this was the case on the left bank. We are aware that there was a shortage of personnel and equipment; but we do not see why better accommodation and shelter should not have been provided for the wounded, and an adequate supply of food and hot drinks prepared for them. The tents were available, and food was on the spot. On the 8th additional tents were pitched by fatigue parties, and food was supplied to most of the wounded. We think also that better arrangements should have been made for feeding and treating the patients on the "Julnar." We are told by the officer who acted as Assistant Director, Medical Services, 7th Division, that he estimated the probable number of casualties in that division at 2,000. Such being the case it appears to us unfortunate that tents, blankets, and food were not prepared for this number. We may add that the arrangements for feeding the patients, alike in the tents and on the "Julnar," were so unsatisfactory that they were at the time severely, and we think justly, criticised by a General Officer who has given evidence before us. We have indeed to conclude, on the evidence adduced, that many of the wounded were indebted to the enterprise of regimental and other officers not connected with the medical services for any food or shelter they received.

136. After the occupation of Shaikh Saad on January 9th about 2,000 of the wounded were moved to a new camp there, the remainder numbering 1,200 being left in a camp on the left bank of the river at Musandaq in charge of a small medical staff. The condition of the camps at Musandaq and Shaikh Saad have been described to us by various witnesses, and we are constrained to find that the arrangements for the accommodation and treatment of the wounded there were very defective. The medical staff was so small that the wounds of many remained undressed for some days. The camps were in a very insanitary condition. The supply of surgical stores and appliances ran short, and there was practically no subordinate staff to see to the welfare of the patients. The suffering and discomfort endured by the unfortunate wounded in these camps were very great, and even up to January 18th, when the Meerut Stationary Hospital took over charge at Shaikh Saad, this condition of affairs continued there. The Officer Commanding this hospital

describes the condition of that camp in the following words:—"On arrival here we found about 195 British and 800 Indian sick and wounded in an irregular camp situated on filthy muddy ground behind the village. . . . There was one Indian temporary I.M.S. officer in charge of the Indians, and he was ill. He had two sub-assistant surgeons and some of the personnel of an improvised cavalry field ambulance to help him. He had no dressings left, and many cases still had on the first field dressings which had been applied on the battlefield. About 200 of the patients had dysentery, and there were no proper latrine arrangements. The state of the camp was indescribable. Near the middle of the hospital tents was a pile of bags of atta, &c., mostly ruined by the rain, which I was told represented 10 days' rations."

137. In the meantime, on the 13th, the camp at Musandaq was broken up, some of the patients being evacuated to Basra and others removed to Shaikh Saad. During this time the only medical staff for this hospital was 3 medical officers for 1,200 patients. For the hospital at Shaikh Saad, where the number of patients varied from 2,200 on the 11th to 1,000 on the 18th, 4 medical officers only were detailed. Of these 2 got ill, and for some time therefore 2 officers only were available for duty. It must also be remembered that this medical staff could ill be spared from the very small establishment of the field ambulances with the force. There was, besides, a great shortage in subordinates, and of various kinds of medical and surgical stores and appliances.

138. In the battle of January 13th and 14th the medical organisation continued to be equally unsatisfactory. The weather conditions had by this time become very bad. On the evening of the 8th it began to rain, and continued to do so intermittently from that date until the 21st, when very heavy rain fell for some days. Even at the time when the battle of Wadi was fought, the difficulty of moving sick and wounded in the rain and heavy mud was considerable, and the field ambulances attached to the force were still very inadequate. The evidence indicates, however, that the available medical staff did all that was possible to collect the wounded as soon as the action ended, and to give them such shelter as was available. Many were collected in an enclosure not far from the Wadi and were there detained for the night. We do not doubt that everything that was possible was done to assist them, but the suffering from want of food, cold, and lack of proper treatment was severe. On the following day they were evacuated to Shaikh Saad, and accommodated in the steamers moored there. On the 15th the steamers accompanying the force moved up to the Wadi, where they remained during the action of January 21st and 22nd, the hospital at Shaikh Saad being left in charge of the Meerut Stationary Hospital. The medical establishment had by this time been slightly reinforced, but was still much below normal. The action took place about 3 miles from the Wadi, and shortly after it began there was a heavy downpour of rain. This made the country, which was already difficult to move in, almost impassable. The attack on the enemy's position was unsuccessful, and the casualties were very heavy. The weather was extremely cold, and the whole country was practically a quagmire. In such circumstances the sufferings of the wounded would have been very great even with the best possible organisation. They were accentuated by the insufficiency of medical personnel, equipment and stores, and by the fact that there was also for some time considerable confusion and want of organisation. Throughout the day and the following night wounded and many unwounded men struggled back to the camp as best they could—walking, riding or carried on stretchers, or in transport carts. The whole country was a sea of mud, and many fell from exhaustion on the way. Those who were in the camp, and unwounded men returning from the battlefield, did their best to assist their wounded comrades to shelter, but we cannot doubt that a large number failed to reach their destination and died from exposure.

Evidence has indeed been given of one case in which not only a wounded man, but the stretcher-bearers bringing him in, died from this cause. We think that the condition of affairs is well illustrated by the following extract from the evidence of a medical officer who was present: "I shall never forget that journey. The wounded and sick were in army transport carts, and my personnel and myself on foot. We started off by crossing a nullah in which there was 3 feet of water, and then stumbled across country, sinking every step knee-deep in mud. We were obliged to take a zigzag course to enable the carts to avoid ditches and other obstacles. It was a terrible night, bitterly cold, with a driving sleet. We were wet through, and had had no food all day. I remember I had an attack of ague when I reached the ship. With great difficulty we got our sick and wounded up the two slippery steep planks which formed the only means of getting on the ship. The ship was overcrowded and understaffed." To add to the difficulties a number of tents which had been pitched for the accommodation of the wounded were, by an unfortunate error of judgment, struck, the officer in charge being under a misapprehension that orders had been issued for the force to advance. When, therefore, the wounded reached the camp the only shelter available was the hospital steamer "Julnar." To this steamer, and to any other steamer they could find, both wounded and unwounded crowded for shelter and warmth, but large numbers failed to secure any protection. The tents that had been struck were repitched, and a certain number of patients were accommodated in them; but as they had been pitched after the rain began to fall, and on ground knee-deep in mud, they were of little use to persons wet through and numb with cold. Nor were those on the steamers in much better case, for many of these vessels were not weather-proof; the men crowded anywhere they could, in gangways, in the stokehold and in the cabins for warmth; but many were and remained for some days wet through. The small medical staff on the spot, and officers and men not connected with the medical services, did all they could to improve matters, and to feed and assist the wounded. In spite of all these efforts the evidence conclusively shows that the sufferings of the wounded were so grievous that it would be difficult to exaggerate them.

139. It is impossible to deal separately with the evacuation of the wounded from these three engagements, for many individuals wounded in different battles travelled down the Tigris together. The hardships of the voyage were much increased during this period by the constant rain and cold that prevailed. As the steamers were not weatherproof, the patients were wet through and numb with cold, and remained in this condition for the whole journey. The steamers were overcrowded, and the defects in the arrangements, to which we have already referred, were more pronounced than on any previous occasion. We cite the following extract from the evidence of an officer as to his experiences on his way down. It would be easy to quote evidence of a more sensational character, but we think that the following is fairly typical:—

"I left Shaikh Saad on the morning of January 12th, on board the "P. 5," with about 300 other wounded. This boat had arrived at Shaikh Saad the previous day, and had just discharged the personnel and mules of a howitzer battery. There were no proper arrangements for food for the wounded on board, and we had to live on bully beef, biscuits and jam; tea was also issued, but there was no bread to be had. We all had to lie on the deck; blankets were issued out. The medical staff on board consisted of one doctor and one assistant surgeon of the Indian Subordinate Medical Department and two sweepers. On arrival at Amara the assistant surgeon was taken off this boat for duty on shore. No one was sent in his place, so from Amara to Basra the one doctor had to attend to some 300 wounded, the majority being stretcher cases. It was impossible for the two sweepers to attend to all the wounded properly, and I know of many cases of men urinating and defœcating in their boots. It rained hard the whole of the voyage down from Shaikh Saad to Basra, and everybody on the boat, and those on the two barges, were soaked to the skin. Bread and meat rations were put on board at Amara, but owing to the want of cooking arrangements we never received a proper meal."

140. The conditions were indeed, in many ways, much worse than after Ctesiphon, and when the steamers arrived at Amara the wounded were in a pitiable state, wet through, dirty, without any dry clothes or covering, benumbed with cold and very hungry. Their wounds had not been properly dressed, and in some instances

cases of fracture were not even in splints. Many of the steamers were overcrowded and filthy, not only with mud and remnants of food, but also with fæces and urine. The condition of things, indeed, was so bad that it is difficult to describe it.

141. We have now to consider the causes which led to this very serious breakdown in the medical organisation, and to state whether the officers on the spot were in any way to blame for this condition of affairs. In our opinion the main causes of the breakdown were fourfold:—

(1) The lack of proper hospital river steamers.
(2) The lack of river transport.
(3) The insufficiency of the medical and subordinate staff and of medical stores and accessories; and
(4) The weather conditions.

We have already discussed the want of provision of proper hospital steamers and the lack of river transport. The insufficiency of the medical and subordinate staff and equipment was, in our opinion, almost entirely due to the failure on the part of the embarkation authorities at Marseilles to despatch the medical units of the 3rd and 7th Divisions simultaneously with the fighting troops of those divisions. We think it necessary to set out the facts of this failure in some detail, as we regard it as one of the main causes of this breakdown.

142. We understand that it is a recognised principle in embarkation work that units despatched for service oversea should be embarked in the order in which they are required to land, and that each unit should be shipped complete, with its equipment, technical vehicles and transport. As each brigade has a field ambulance allotted to it on service, it follows that a field ambulance should have been despatched from Marseilles with every four battalions embarked, so as to enable each brigade to take the field as soon as it landed at Basrah. Instead of adhering to this well-known rule, the embarkation staff at Marseilles despatched the combatant units of each division first, keeping back the medical units till the last. Besides separating brigades from their field medical units, they added to the confusion so caused by breaking up the latter in order to economise shipping. The result of this was that, when the field ambulances arrived at Basra, it was found in most cases that their personnel was on one ship, their equipment on another and their transport in some cases on a third. To make matters worse, certain of the transports employed were of too deep draught to cross the bar at the mouth of the Shatt-el-Arab, thus necessitating transhipment at Koweit. In consequence of these unbusinesslike arrangements, the medical units from France were not only late in arrival at Basra, but had to be detained there for some days, while their personnel and equipment was being sorted out and collected. Their transport had in every case to be sent up later, generally by march route, as the shortage of shipping precluded its despatch by river steamer. The length of the march and the delay caused by floods and other obstacles retarded progress considerably, so that the animals and vehicles of most of these field ambulances did not begin to reach the front until March.

143. We have found it difficult to ascertain why the embarkation staff at Marseilles adopted this unusual procedure, and we realise that there may have been reasons for their action of which we are not aware; but so far as they can be gathered, the facts of the case appear to be as follows. Troop trains in France are of two fixed types—the "type combatant" and the "type parc." The railway transport authorities would not despatch any "type parc" trains until all the "type combatant" trains had started. The "type combatant" trains are unsuited to the conveyance of units such as field ambulances which are equipped with a relatively large amount of transport. Similarly the "type parc" trains are unsuited to combatant units. The field ambulances were thus perforce the last units of the 7th Division to entrain, and though all the trains arrived at Marseilles from the front within a period of 26 hours, and a rearrangement at Marseilles would thus appear to have been feasible, the order of arrival seems to have governed the order of embarkation, with the result that the medical units were the last to be shipped.

144. No objection to this arrangement seems to have been made by the divisional commander concerned, firstly because the entraining arrangements were in the hands of the higher authorities, who presumably had full information as to the requirements of the situation, and secondly because the War Office, in a letter dated November 1st, 1915, had stated that the primary destination of both divisions was Egypt, where they would be reorganised, prior to despatch to Mesopotamia in vessels which could cross the Fao bar. This is borne out by the fact that the transports were only rationed for the voyage to Egypt, and that a camp was actually prepared at Tel-el-Kebir for the reception of these Indian divisions.

145. During the embarkation of the 7th Division the embarkation staff found it necessary to separate units from their 1st line transport and drivers from their horses. The divisional staff objected to this proceeding, but was told that the Base Commandant had strict orders to allow no transport to sail without her full complement of troops and animals. The splitting up of units was held to be unavoidable as, owing to differences in sanitary and cooking arrangements, some transports had to be reserved for British and others for Indian troops. We are informed that the recommendations of the divisional staff would have provided for the embarkation, with the headquarters of each field ambulance, of the whole of its equipment, and a sufficiently large portion of personnel to allow of its being employed as soon as it landed. Owing, however, to the non-arrival of certain ships, the whole trooping programme had to be recast, and the piecemeal embarkation of units was insisted on, so as to utilize shipping to the fullest possible extent. We gather that the confusion resulting from this arrangement must have been considerable, as the wagons and ambulance vehicles of two medical units were crowded out at the last moment and left on the quay at Marseilles. Besides breaking up units and delaying their embarkation, the order of despatch of medical units was changed so as to conform to shipping requirements. Thus, instead of giving priority to the field ambulances which would be required by their brigades immediately on landing, one of the first medical units of the 3rd Division to be embarked was the Secunderabad General Hospital, which could only be used at the base or on the lines of communication, and was less pressingly required than the mobile medical units.

146. The urgency of relieving General Townshend made it necessary to expedite the despatch of troops to Basra, and the orders for the disembarkation of the two Indian divisions in Egypt were accordingly cancelled. With the exception of two or three units which transhipped and were accommodated for a few days at Tel-el-Kebir, the troops proceeded direct to Mesopotamia, no opportunity being given them to reorganise or collect their scattered personnel and equipment. A statement is attached * giving full particulars as to the dates of despatch and arrival of each medical unit belonging to these two divisions. It will be observed that on the date of General Aylmer's starting for the relief of Kut, namely, January 4th, not a single complete field ambulance had disembarked at Basra, though portions of some units had just arrived there. The embarkation staff made great efforts to despatch these ambulances up-river as quickly as possible, for the need of medical reinforcements at the front was fully appreciated. None of them arrived, however, until after the battles of Shaikh Saad and the Wadi had been fought. The late arrival of the medical units of the 3rd and 7th Divisions thus created a temporary but very serious shortage of medical personnel and equipment in the Tigris Army Corps, which could not have been foreseen, either in Mesopotamia or in India. The earlier arrival of these units would not have removed the hardships caused to the wounded by rain, cold and exposure, or those arising from the lack of suitable river transport. It would, however, have secured the presence on the field of battle of a large number of fully staffed and well-equipped medical units, and so would have facilitated the rapid collection and removal of the wounded, besides providing the latter with the personnel required to cook and distribute their food and attend to their bodily wants. We consider that the breakdown which occurred after the January battles was largely, though indirectly, due to the unsatisfactory way in which the medical units of the 3rd and 7th Divisions were despatched from Marseilles.

147. We may explain that our remarks in regard to the despatch of medical units, apply also to supply units.

* Annexure III.

Instead of despatching the latter with their brigades, they were kept back in the same way as the field ambulances, with the result that General Aylmer had only nine supply and transport officers with him when he commenced his advance, instead of 40 which would have been the normal complement. The shortage in the subordinate and follower ranks was equally marked and the complaints made in regard to the feeding of the sick and wounded after the January battles, were partly due to this cause. The issue of rations was often delayed through the inadequacy of the supply personnel, which could not cope with the sudden demands created by the influx of hundreds of wounded. There was no lack of food and comforts on the steamers which acted as supply columns, but there was not the staff to provide for their rapid issue and distribution. This deficiency undoubtedly reacted on the sick and wounded and accounts to some extent for the complaints that patients in the ambulances were unable to get food. The staff of the Tigris Corps had been hurriedly formed, and the officer in charge of administration had not had much experience in this important work. The staff of the 7th Division did not arrive from France until after the battle of Shaikh Saad. Previous to that action, it was entirely extemporised. With such defective machinery, friction and lack of co-ordination were inevitable, and these, doubtless, tended to increase the difficulties of the overworked and understaffed medical services.

148. We believe that no action on the part of the officers responsible for the medical arrangements of the force could have prevented, to any great extent, the sufferings endured by the wounded on January 13th, 14th, 21st and 22nd; and the evidence before us abundantly proves that, generally speaking, the energy, kindness and industry of the executive medical officers who were directly in charge of the wounded, were beyond all praise. We do not, for reasons already stated, consider that the administrative officers of the medical services used available resources in the best manner possible in the engagement of the January 7th; but we do not think that they can be held responsible for the breakdown which occurred after the later actions. We desire also to place on record our opinion that the Corps Commander, General Aylmer, cannot in any way be held responsible for this failure. Military reasons, and the direct orders of his superior officer, made it incumbent on him to advance without delay to the relief of Kut with an improvised staff and a force not properly organised. His medical establishments were about one-third of the authorised scale, and the shortage in supply and transport establishments was greater still. These deficiencies he represented from time to time to the Army Commander, both before his advance and after the battle of Shaikh Saad, referring at the same time to the lack of river hospital steamers. In such circumstances it would, in our opinion be unfair to hold any man, much less an officer whose solicitude for the welfare of the soldier is so well known, in any way to blame for the sufferings which resulted from these deficiencies.

149. We have stated above, that the conduct of the executive medical officers, generally speaking, was beyond all praise; but we must refer to the case of an officer, whose conduct has been severely criticised by numerous witnesses. It has been freely stated that after the action of January 21st, when this officer was in medical charge of the steamship "Julnar," then used as a hospital steamer he was negligent in his duty, that the patients who were sent to him received insufficient food and no proper medical treatment, and that they were discharged from hospital with orders to return to their regiments when they were yet unfit for duty. These facts were reported at the time by General Kemball to Sir Fenton Aylmer, who found, after inquiry, that the charges were not proved. The evidence that we have recorded, and the written statements that we have received, do not in our opinion support this finding; but in view of the fact that the decision was arrived at after an inquiry made at the time, by an officer with first-hand knowledge of the facts, we do not think that we ought to differ expressly from it. We may say, however, that this officer was in our opinion very fortunate in being exonerated from blame.

150. *Attack on Es-Sinn.*—For various reasons the medical arrangements for the evacuation of the wounded at the battle of Es-Sinn were much more successful than during the operations of January. The weather conditions were more favourable, the field medical units attached to the 3rd and 7th Divisions had arrived at the front, and the increase in the medical establishments made it possible to detail a fairly adequate staff of medical officers and subordinates to each steamer used for the transport of sick and wounded to the base. The arrangements were in many respects far from ideal, but we have reason to believe that the improvement was realised by everyone and much appreciated. The battle took place on the right bank of the river and extended to a distance of 16 or 17 miles from Wadi where the force was encamped, the total number of wounded being approximately, 2,440. It appears that the original intention was to collect these wounded in a part of the enemy's position known as the Dujailah redoubt. As the attack was not successful, these plans had to be changed and ultimately the wounded were collected in a place called the Dujailah depression, at some distance from the redoubt. Throughout the day and during the night following the engagement, the wounded were brought into this collecting post and were there fed and tended at the field ambulances. On the following morning they were sent in a convoy to Wadi camp, a halt being made *en route* for water. The convoy reached Wadi the same night, and the patients were there accommodated in field ambulances and clearing hospitals. There was some delay in crossing to the left bank of the river by the bridge near the camp, but this delay was, we think, unavoidable. The evacuation from Wadi to the base was promptly effected in river steamers, to each of which a medical staff and a supply of medical stores, appliances and comforts was allotted. There was no delay in the evacuation, and the wounded were received in good condition at Basra. We think that the arrangements on this occasion were as satisfactory as circumstances permitted. The main sources of discomfort were twofold—the use of transport carts for the conveyance of wounded by land, and the lack of river hospital steamers. The want of ambulance wagons, tongas, or motor ambulances, was serious, owing to the great distance of the battlefield from the camp, and the sufferings of the wounded during this journey of 17 miles gave rise to great complaints.

151. Subject to these defects, we think that the arrangements were satisfactory and that great credit is due to the officers directly responsible for the collection and evacuation of the wounded. In arriving at this conclusion we are not unmindful of the criticism of a witness who has attacked the arrangements made on this occasion in somewhat severe language. We do not doubt that discomfort or suffering was undergone by individuals, and that certain patients received less attention than others at the collecting station and on arrival at the camp; but such experiences are unavoidable in the confusion following a battle, particularly when a reverse is experienced and the casualties are heavy. The great preponderance of evidence before us is to the effect that on March 8th there was a great improvement in the medical organisation, and that on the whole the evacuation of the wounded was effected expeditiously and methodically, and we are prepared to accept this as correct. We believe that this is also in accordance with the opinion of the Army Commander, Lieutenant-General Sir Percy Lake, an officer who has, if we may say so without impropriety, made every endeavour to secure the amelioration of the medical arrangements.

152. *Operations on the Tigris in April.*—The next action, that of April 5th, when the Umm-al-Hannah and Falahiyah positions were attacked, was witnessed by two of the Commissioners who personally investigated the working of the arrangements for the collection and evacuation of the wounded on the battlefield. These arrangements were carefully thought out and proved very successful. The number of stretcher bearers was sufficient, the collecting stations were conveniently situated, and ample provision was made for the comfort and medical treatment of the wounded, who were promptly evacuated to the camp at Wadi by the "Aerial" motor boat and in motor cars and ambulance wagons. The organisation was methodical and worked smoothly, and the Commission saw nothing to call for unfavourable criticism in the arrangements made, save that the provision of more motor boats and of additional ambulance transport would have been a convenience. The Turkish

wounded were treated at the collecting station and received the same attention as the British. The clearing hospitals and field ambulances were also visited. It was found that the latter were really acting as hospitals and with equipment for 100 patients, were accommodating 300 or even more, in the emergency. As these units are not equipped for so many patients, or to perform the duties of clearing hospitals, there was necessarily some discomfort; but the medical officers present worked unceasingly to minimise this inconvenience and to make their patients comfortable.

153. Fighting continued day by day, and on April 7th and 9th attacks on the Sannaiyat position, on the left bank of the Tigris, in which heavy casualties were incurred, were repulsed. Progress continued to be made on the right bank, but the medical conditions arising from this continuous fighting call for no special comment save that, on occasions, the lack of proper ambulance land transport was noticeable. On April 17th an attack was made on the Beit Aicsa position, on the right bank of the river. The fighting was very severe, especially when a heavy counter attack was made by the Turks. The firing was then so heavy, that it was very difficult to collect the wounded. Many lay all day in the Turkish trenches, into which they had penetrated. The ground behind these trenches was swept by fire, the Turks were sniping the stretcher bearers, and after several of the latter had been hit, all further attempts to move the wounded from such situations were abandoned till nightfall. The stretcher bearers had then to wade through a marsh which was deep in places, but performed the task with their accustomed devotion. We should like to take this opportunity of calling attention to the good work done by stretcher bearers throughout the campaign. The heroic conduct of the men of the Indian Army Bearer Corps has won the admiration of the whole force, and seems to justify their being granted a higher status than that which they enjoy at present.

154. The arrangements at Wadi were similar to those which obtained in the earlier fighting, but the strain on the establishments was greater as the casualties were very heavy. Many of the field ambulances, indeed, were accommodating for days at a time twice and thrice the number of patients they were equipped to deal with.

155. The arrangements on the steamers, while still leaving a great deal to be desired, showed a great advance, the deficiencies apparent in March having to some extent been made good. There was, however, still much room for systematic improvement, as is evidenced by the different conditions obtaining on different boats. Thus "P. 5," one of the vessels employed, had cots for nearly all lying down cases, the latrine accommodation was good, there was no insufficiency of sweepers or bed-pans, and the supply of food and comforts was satisfactory. On the other hand, the "P. 7" was very crowded and short of trained personnel and comforts; while the "Medjidieh," in addition to being overcrowded and not well supplied with comforts, was short of food and blankets.

156. The ineffectual effort to capture the Sannaiyat position, which took place on April 22nd, marked the termination of nearly three weeks' continuous fighting, designed to relieve the garrison of Kut. The medical arrangements for this action were similar to those made for the preceding engagements of the same month, and the gradual but steady improvement observed in the general medical conditions was fully maintained.

157. We think that the administrative and executive medical officers deserve great credit for the successful collection and evacuation of the large numbers of wounded in the almost continuous fighting which took place during this month. The casualties were very high, the available resources in the way of accommodation, personnel and supplies were often far from plentiful, and the difficulty of securing river steamers was frequently considerable. In spite of all these obstacles the wounded were, so far as we have been able to ascertain, treated promptly and adequately. Every effort was made to reduce discomfort to a minimum, and the patients were evacuated expeditiously to Amara and Basra and thence to India. The strain thrown upon the medical authorities will be the more readily appreciated when it is realised that in the month of April alone 5,747 sick and wounded were evacuated to the base.

158. *Supplementary considerations. Hospitals at Basra.* We have not, in our detailed examination of certain phases of the campaign, discussed the treatment of the sick and wounded in the hospitals at Amarah and Basra, as we think it is more convenient to do so separately. The hospitals at Basra have, generally speaking, been well managed throughout. In the early stages of the war there was undoubtedly some difficulty in securing suitable food, but we think that complaints in regard to dieting have been somewhat exaggerated. In April, May and June there was considerable overcrowding, but the consequent discomfort was much reduced by the labour and energy of the staff. In the latter portion of the campaign conditions improved considerably, and we have ample testimony of the gratitude of numerous patients for the care and excellent treatment which they received in the British General Hospital. The introduction of Sisters of Queen Alexandra's Nursing Service into this hospital, as also into some of the hospitals at Amara, has added greatly to the comfort of the patients. There are deficiencies in the way of buildings, electric fans and personnel. These points have already been referred to, but otherwise we think that there is little room for unfavourable criticism, and we have every reason to commend the medical administration of the British General Hospital. The same observations apply generally to the Indian General Hospital. We think, however, that the standard of comfort is not so high in Indian as in British hospitals, and we consider that efforts might be made to copy the excellent models afforded by the Indian war hospitals in Bombay.

159. *Hospitals at Amara.*—The Amara hospitals have laboured under great disadvantages. Some of the accommodation is unsuitable, the hospitals are not fitted with electric fans, and they have frequently been overcrowded, particularly after heavy engagements up the Tigris. The personnel has from time to time been depleted to meet urgent demands at the front, and there has been occasional delay in obtaining supplies, stores and appliances. In spite of all these difficulties the officers of the hospitals have done excellent work, for which they deserve great praise. The administration of the Rawal Pindi Hospital is specially worthy of commendation.

160. *Hospitals at Bombay.*—The accommodation of the sick and wounded on their arrival in India is so essential a part of the medical arrangements of the Mesopotamian force that, though not strictly within our terms of reference, we think it right to refer shortly to the matter. We are influenced in doing this by the fact that, at the time of our appointment, a substantial increase in the British war hospital accommodation at Bombay was plainly necessary. On April 1st there was in Bombay but one completed hospital of 500 beds for the accommodation of British troops, and this hospital was poorly found. In addition to this, provision had been made for 60 officers. At Deolali, Poona, Karachi and Secunderabad there was accommodation for 84 more patients, or a total of 644 beds. Other patients were distributed among the station hospitals throughout India. Owing to the addition of a British division to the force in Mesopotamia, mostly composed of young soldiers with no experience of life in the tropics, these preparations were clearly insufficient, especially in view of the approaching hot weather. We are glad to say that this danger was appreciated in time and on our return to Bombay we were pleased to find that in that city alone, four large new British war hospitals, accommodating 2,200 patients, had been provided. Moreover, additional accommodation, to the extent of 1,222 beds, had been prepared at Deolali, Secunderabad and Poona, and further provision for invalids had been made on a large scale throughout India. In selected hill stations provision for 5,000 convalescents was also being arranged.

161. The general standard of equipment at Bombay has been immensely raised, so that the new war hospitals there would bear favourable comparison with any similar hospitals in the United Kingdom. It was indeed a pleasure to visit such institutions as the "Victoria," "Alexandra" and "Freeman Thomas" hospitals. The latter, which has been the special care of Her Excellency Lady Willingdon, had been in preparation before the time under review, but in the case of the other two, business buildings were converted into splendidly-equipped hospitals in less than two months.

162. We were much impressed by the successful efforts of Surgeon-General Sir Pardey Lukis, ably seconded in Bombay by Brigadier-General Knight, in grappling so promptly and effectively with a dangerous situation. In the case of the Victoria Hospital this work was much furthered by the assistance given by Major Hepper, R.E., on behalf of the Great Indian Peninsula Railway. The provision for the Indian wounded calls for less comment. Nearly 3,000 beds were available in hospitals at Bombay, Poona, Secunderabad and Karachi on April 1st, and the number has since been increased by about 300. In addition there are now over 2,000 beds in special war hospitals throughout India, while some 400 more are being got ready. Accommodation for 8,000 Indian convalescents is also in course of preparation, and the general improvement in the situation is manifest. We cannot refer to this matter of hospitals for Indian troops without instancing the "Lady Hardinge" and "Marine Lines" Hospitals, Bombay, as examples of the high standard of efficiency which can be attained in favourable circumstances, when the officers commanding take a keen interest in their work. The activity of charitable organisations is a great feature in Bombay, and under the energetic and popular leadership of Their Excellencies the Governor and Lady Willingdon, an immense amount has been done for the comfort of our invalids, British and Indian, by the sympathetic and well directed benevolence of a generous and united community.

163. *Gifts and charitable organisations.* -A very large number of comforts and medical accessories of various kinds have been supplied to the sick and wounded of the force by various charitable organisations. The principal of these are the Indian Council of the Order of St. John, Lady Carmichael's Bengal Women's Fund, the Women's Branch Bombay Presidency War and Relief Fund, the Madras War Fund, the Indian Soldiers' Fund, and the Joint Committee of the British Red Cross Society and the Order of St. John; but a great deal of assistance has also been rendered by a number of smaller charitable associations. These organisations have done excellent if independent work, and the medical arrangements in Mesopotamia have been greatly helped by their assistance, the money value of which in the aggregate has amounted to very large figures. Unfortunately, at the beginning of the war a system, since abolished, was in existence, under which gifts either in money or kind for the assistance of the medical organisation of the force had to be offered, in the first instance, through the Director, Medical Services, India. This led to delay and to the further unfortunate result that there was a temptation to use such gifts in substitution of Government supplies, rather than in supplementing the latter. The provision of motor boats is an instance in point. Whenever an offer of a Red Cross motor boat from a private source was received by the Director, Medical Services, India, the vessel was described and tendered to the General Officer Commanding, Mesopotamia, but no suggestion was made that Government was prepared to take any action to supply these boats. Once it was known that such boats were required, we should have thought that the number and types of launches needed would have been ascertained and the vessels provided by Government. But from first to last it would appear that not a single Red Cross motor boat, either of a runabout or ambulance character, has been provided by the Government of India. The demand for these boats is still very urgent. Ten have already been provided by the Joint Committee, and 15 more are being sent out by that body, while the Indian Council of the Order of St. John has sent out four such vessels, besides two river boats and two barges. Without this assistance the medical work on the river could not, in our opinion, have been carried on satisfactorily. One of these vessels, the officer of which has kept a log, had carried over 10,000 patients before the Commission left Mesopotamia. The neglect to procure sufficient motor boats is, in our opinion, the more regrettable in view of the splendid work done by the "Aerial," a motor vessel of unusual type provided and personally worked by a private gentleman, Mr. T. A. Chalmers of Jorhat, Assam. Witness after witness has borne testimony to the invaluable work done by this boat in evacuating wounded from the front to the vessels in the river acting for the time being as hospital steamers. Mr. Chalmers, in undertaking this self-imposed duty, was constantly within the zone of Turkish fire; but the enemy, recognising the nature of his work, have, as we are informed, respected the Red Cross under which he was working and refrained from shelling the vessel. As another example of the reliance of the authorities upon charitable effort, we may mention that the wounded were evacuated to India upon ordinary transports until the hospital ship "Madras" was provided by the Madras War Fund of which His Excellency the Governor is President. At one stage there would seem to have been a disinclination on the part of Sir John Nixon to accept help from Great Britain, and little advantage was taken of offers made by the Indian Soldiers' Fund, and by the Joint Committee of the British Red Cross Society and Order of St. John. The final reply to the offer of assistance by the Indian Soldiers' Fund when it was at last accepted under a renewed telegram from the Secretary of State indicated, among other things, that of bandages and surgical dressings "as many as possible" would be useful.

164. In our opinion this failure to utilise the offers of charitable organisations to the full extent is not a little to be ascribed to the system, then in vogue, which stipulated that all offers of Red Cross assistance should go through the office of the Director, Medical Services, India, and that the gifts should be distributed in consultation with the military medical authorities, to prevent overlapping. It is true that charitable assistance should mainly be employed in providing the sick and wounded with extra comforts over and above those considered necessary by Government, but if it is to be of real help to the medical services in a crisis, experience has shown it must also be prepared to meet deficiencies in articles which are normally supplied by Government. The Red Cross organisation cannot step in and help in this way during an emergency unless it has prepared a surplus over and beyond the official estimates. This preparation may take the form of accumulated supplies on the spot, or, if advisable, arrangements for rapid acquisition and delivery may take the place of actual purchase. Overlapping of this character, entered into deliberately and with discrimination, is a necessary and helpful form of Red Cross assistance. If the military medical services were perfect and could foresee every event, Red Cross organisations would be largely superfluous; it is when the unexpected happens that the value of a well considered overlap becomes apparent. For these reasons we are pleased to find that Government control of voluntary effort has now been abandoned.

165. There is another kind of overlap, however, which consists in the multiplication of charitable organisations pursuing the same aims. The unregulated overlap produced in this way is wasteful, and in the Red Cross assistance which India has so prodigally afforded to the Mesopotamian force, the disadvantage of unco-ordinated effort has been at times apparent. We are glad to learn that this has now been taken in hand, and that under the Presidency of His Excellency the Viceroy, an Indian branch of the Joint Committee of the British Red Cross Society and Order of St. John has been formed with a view to co-ordinating all Red Cross work in India. The parent body is possessed of very large funds, and the extension of its organisation should prove of considerable value in the future.

166. We cannot leave this subject without referring to the fine services of the Young Men's Christian Association in Mesopotamia. While the main work of this organisation has lain with the troops, its members have on many occasions been of great service in distributing comforts to the sick and wounded and in helping to make the lot of the convalescent soldier comfortable.

167. *Turkish prisoners.*—The Turkish wounded and sick taken prisoner by our forces seem, on the whole, to have been looked after satisfactorily. Opportunity was taken of the existence in Basra of the Lansing Mission Hospital, supported by an American society, to utilise the building and the services of the missionary in charge, Dr. Bennett, in order to provide for Turkish sick and wounded prisoners of war. From the beginning of the campaign this hospital was so utilised, convalescents being sent with the other prisoners of war to India. The advantages secured by this arrangement were twofold: in the first place it relieved the overworked medical establishments of the force of a duty which would otherwise have fallen on them; and, secondly, Dr. Bennett's knowledge of Turkish

and Arabic enabled him to do much for his patients which a doctor ignorant of those languages could not have done.

168. The hospital was at first under the management of Dr. Bennett, with a sufficient staff, including his wife, who was also a qualified medical practitioner. Any extra personnel or surgical and medical equipment required were provided by the military authorities, who made a capitation grant to the management of seven annas per day per prisoner. In addition to this a sum of Rs. 10,000 was allotted to Dr. Bennett for the needs of his patients, and in consideration of these allowances Dr. Bennett fed the prisoners until July, 1915. In that month Dr. Bennett proceeded to India, the hospital was shut, and its patients were interned in a ward of the Indian General Hospital. In December, 1915, Dr. Bennett returned, and his return coinciding with a demand for more space for our own sick, the Lansing Hospital was reopened. Shortly after this a new prisoners of war camp was established to accommodate healthy prisoners pending their evacuation to India. A hospital hut in this camp was used for slight cases of illness, the more serious ones being sent to the Lansing Hospital. In the first week of February, 1916, fever broke out in this camp and in the hospital, which, first diagnosed as malaria, proved ultimately to be fever of a malignant character. The commandant of the camp, Captain Burgess, was taken ill. Captain Hebbert, I.M.S., specially detailed to be resident in the camp to investigate the disease, was attacked by it and subsequently died. Dr. and Mrs. Bennett and some members of his staff were also taken ill, and Mrs. Bennett died. At the same time there was severe mortality among the prisoners. Systematic efforts were made to eradicate the disease, and the Assistant Director of Medical Services at the Base was removed to another appointment.

169. The Lansing Hospital was then taken over by the military authorities and staffed with a section of an Indian field ambulance under Lieutenant Stocker, I.M.S., while the prisoners of war camp was placed under Major Sealey, I.M.S. The abnormal death rate disappeared, and conditions in both the Lansing Hospital and the prisoners of war camp improved. To avoid any possible risk of recrudescence of the disease at the Lansing Hospital, that building is, for the moment, disused. For a time, the services of Turkish medical officers taken prisoners were utilized for the treatment of their own sick, but owing to their want of efficiency they have been replaced by Indian Medical Service officers.

170. On the capture of Nasariyeh, the Turkish Military Hospital was found to contain 125 sick and wounded Turks. These were looked after by their own medical officers, who seem to have been jealous of professional interference on the part of our medical staff. The sick from the prisoners of war camp at Nasariyeh were sent to this hospital, but the condition of the patients therein was not satisfactory, and eventually they were all evacuated to Basra. The death rate among the Turkish prisoners, generally, was high, being due no doubt partly to the inefficiency and neglect of the Turkish doctors, and partly to their own want of cleanliness. This latter trait has rendered them a source of danger, not only to themselves, but to all with whom they have been brought in contact.

171. *Summary.*—To sum up the position, we find that from a very early stage in the campaign, the sick and wounded have undergone avoidable discomfort and at times great suffering owing to defective medical arrangements. The main causes of the hardships were:

(1) The lack of river hospital steamers;
(2) Insufficiency of the medical personnel;
(3) The shortage of river transport;
(4) The omission to provide proper means of evacuating the wounded by land; and
(5) In so far as the operations in January are concerned, the very unfortunate omission on the part of the embarkation staff at Marseilles to despatch the medical and supply establishments of the 3rd and 7th Divisions with the combatant units.

172. The suffering thus caused, slight during the earlier actions, and varying as it did on different occasions owing to differing local conditions, was intensified at Ctesiphon by the presence of powerful enemy forces, and by the length and insecurity of the line of communications. In January, 1916, when it culminated, the hurrying of two fresh divisions into action before their medical personnel or equipment were available, and very unfavourable weather, greatly aggravated the situation. The state of affairs after the action of January 21st can indeed only be described as deplorable. We are satisfied, also, that the failure in the medical organisation had a material effect on the moral of the troops. We recognize, however, that in Mesopotamia, even with the best medical organisation possible, the sufferings of the wounded, during cold, wet weather, after an unsuccessful action, must always be very great.

173. The fundamental defect has been the shortage of river transport which has reacted on the medical organisation, both directly and indirectly. Not only has it prevented a permanent allotment of river steamers to the medical services for use as hospitals, and frequently retarded the despatch of medical units and stores to the front, but it has, on many occasions, forced the military authorities to curtail the equipment and personnel of medical units in the field to a dangerous extent. Its indirect effects have been equally important. It has delayed the completion of hospital buildings and impeded the provision of comforts for the sick. It has also affected the health of the troops in that it has, from time to time, been the cause of incomplete rations being supplied to them. We believe, also, that if river transport had been more plentiful, better arrangements would have been made for supply ing the troops with pure drinking water.

174. There has never been, in our opinion, anything more than a minor and temporary shortage of any of the ordinary kinds of medical stores at Basra; but, for various reasons, the shortage of these stores up country has from time to time been a cause of trouble, and the more expensive necessaries for hospitals in the tropics, such as ice machines, electric plant and electric fans, have been throughout, and were at the time of our leaving still very deficient., Where there has been any deficiency at Basra, this has been intensified up-river, owing to lack of transport; and even when Basra has been fully supplied with some particular class of stores, this has not always been available at places on the line of communications.

175. The medical personnel and subordinate staff have always been deficient in numbers, the deficiency in assistant surgeons and sub-assistant surgeons being very marked, and it has only been the continuous and untiring labours of a devoted but overworked staff that has again and again prevented an absolute breakdown. The position in this respect both in the higher, in the lower, and in the menial grades, was still serious when we left Mesopotamia. As the deficiencies in personnel and river transport have not yet been made good, and as no adequate medical transport, either by land or by river, has yet been provided, it follows that the danger of a repetition of avoidable suffering is not yet past, though every effort is being made to improve the situation. Probably only the completion of the contemplated railway will render the position quite safe.

176. As to the responsibility for this state of affairs, we think that it was in great masure due to defects inherent in the medical organisation of the Army in India. We also consider that the rigid economy which before the war was exercised in respect of military expenditure in India, and the spirit which this policy has engendered as to the comparative merits of economy and efficiency, have contributed materially to the breakdown. But though much may be attributed to the system and the spirit which it has fostered, we feel that a grave responsibility for that part of the suffering which resulted from avoidable circumstances rests with the Senior Medical Officer of the Force, Surgeon-General H. G. Hathaway, and with General Sir John Nixon, the General Officer Commanding the Force, from April 9th, 1915, to January 19th, 1916. General Hathaway did not represent with sufficient promptitude and force the needs of the services for which he was responsible, and in particular failed to urge the necessity for adequate and suitable transport for the sick and wounded with that insistency which the situation demanded. General Nixon did not, in our opinion, appreciate the conditions which would necessarily arise if provision for the sick and wounded of his force were not made on a more liberal scale.

177. The evidence also indicates that on various occasions the medical arrangements might have been improved by better organisation and co ordination between the different services, and for this defect the local officers are responsible. We cannot, however, absolve the military and medical authorities in India from responsibility for many of these deficiencies, in particular for the continuing neglect to supply the expeditionary force with that separate transport for sick and wounded, both by land and water, which the teaching of experience has shown to be essential in a properly organised enterprise of this character. We include the military authorities in India in this criticism, because the medical services are part of the military organisation. The officer directly responsible is, however, the Director of Medical Services, India. This appointment was held at the beginning of the war by Surgeon-General W. Babtie, who left India on June 6th, 1915. He was succeeded by Surgeon-General J. G. McNeece on July 8th, 1915, and the latter proceeded on sick leave on April 15th, 1916. We are informed that Surgeon-General McNeece was appointed by the Secretary of State without any reference to the military authorities in India. The responsibility for the want of river transport, on the other hand, is a matter which concerns the military authorities directly.

178. We realise the serious character of such findings, but in view of the fact that we are definitely required to assign the responsibility for the breakdown it is obviously our duty to do so to the best of our ability. We think, however, that the authorities referred to have been much hampered by changes in policy, and by lack of timely information as to the ultimate objective of the expedition. In criticising the action of the authorities in India, we think, further, that full consideration should be given to the unprecedented strain which has recently been put on all their available resources. Not only has it been necessary to supply the demands of at least four Expeditionary Forces overseas, and to make preparations for frontier and internal requirements on a large scale, but arrangements have also had to be made for the reception and treatment in India of invalids from France, Gallipoli, Egypt, and East Africa. Moreover, the assistance in the matter of personnel, equipment and stores which, in less abnormal times, might have been expected from outside India, has, until recently, seldom been available. We have, generally speaking, nothing but praise for the work of the executive medical officers in Mesopotamia, and we have abundant evidence that they have done marvellously well with little material. On the other hand, we consider that some of the administrative medical officers, though always anxious to do what was right, were at times wanting in foresight as to the probable needs of the force, less insistent than they should have been in pressing their demands for essential requirements, and on one or two occasions lacking in energy and power of resource in the measures taken for the accommodation and comfort of the sick and wounded.

179. We desire to express our grateful thanks to many officers who have assisted us in our inquiries. Where so many have helped, it is difficult to select particular persons; but we do not think that we ought to omit the names of Lieutenant-General Sir Percy Lake, Major-General Money, General Staff, Major-General Cowper, D.A. and Q.M.G., Colonel Irvine, D.D.M.S., Captain Hamilton, D.A.D.M.S., Colonel Winter, A.Q.M.G., Major W. N. Campbell, D.A.A.G., Captain Macrae, D.A.Q.M.G., and Captain T. Murphy, the officer in charge of the medical statistical branch of the Adjutant General's office at the Base. We have also to acknowledge the great assistance given us by all branches at Army Headquarters, India. We think it right to say that much of the evidence that has been given to the Commission has been marked confidential and we believe that many of the witnesses have given evidence under the impression that their statements would not be published. In these circumstances, we think that it would be a breach of confidence if the evidence contained in the appendix to this report were made public.

180. In conclusion we desire to say that we have, throughout our inquiry, been pressed by the consideration that time was of the essence of the matter, that substance was more important than form, and that it was expedient that we should formulate our conclusions as early as possible. In these circumstances, we have not thought it desirable to keep back the report to remove defects in form which, if time had been available, might have been remedied by more careful revision.

We have the honour to be, Sir,
Your most obedient Servants,
W. H. VINCENT.
A. H. BINGLEY.
E. A. RIDSDALE.

ADDENDUM.

On my arrival at Bombay on April 4th, I was asked to join this Commission by His Excellency Lord Hardinge, who was leaving India that day. I consented and left for Basra on April 9th, where, on arrival, I at once got in touch with my colleagues. I found that they had been in Mesopotamia for a month, and that acting upon an earlier and restricted reference thay had already examined over 130 witnesses, and travelled by river to the firing line and back again in order to acquaint themselves at first hand with the medical conditions.

After discussion with them, since the value of the report must be diminished by every day's delay in its issue, we agreed to consider the work continuous, I joining in the inquiry at the point at which they were, and reading up at my leisure, and investigating when necessary, the evidence which they had already accumulated.

It follows from this that the great bulk of the very heavy work of detail involved in this investigation, and apparent in the appendix, has been the labour of my colleagues.

E. A. RIDSDALE.

ANNEXURE 1.

(*Referred to on page* 1.)

No. H.-2418, dated Delhi, March 31st, 1916.

From—MAJOR-GENERAL B. HOLLOWAY, C.I.E., Secretary to the Government of India, Army Department.

To—The HON. SIR WILLIAM VINCENT, Knt., I.C.S.

With reference to the correspondence ending with my telegram No. H.-2407, dated March 30th, 1916, I am to say that it has been decided that the commission to which you have been appointed will assemble under the orders of the Government of India.

2. I am directed therefore to forward revised orders and terms of reference for the commission appointed for the purpose of investigating and reporting upon the arrangements for dealing with the wounded and sick in Mesopotamia in substitution of the orders and terms of reference sent to you under letter No. 41551, dated March 2nd, 1916, from the Chief of the General Staff.

Copy of the foregoing is forwarded to:—

Lieut.-General Sir Percy Lake, K.C.B., K.C.M.G.
Major-General A. H. Bingley, C.B., C.I.E.
Mr. E. A. Ridsdale.

ORDERS FOR THE HON. SIR WILLIAM VINCENT, KNT., I.C.S., MAJOR-GENERAL A. H. BINGLEY, C.B., C.I.E., AND MR. E. A. RIDSDALE

1. The Government of India have appointed you Commissioners for the purpose of investigating and reporting upon the arrangements for dealing with the wounded and sick in Mesopotamia, in accordance with the terms of reference attached.

2. You will proceed to Basra, where you will report to the General Officer Commanding, Force "D," who will give you every facility in the execution of your duties.

3. Copies of all war diaries, reports, despatches, books and maps, and other information that you may require, will be provided both by Army Headquarters and General Officer Commanding, Force "D."

4. You are entitled to call and examine any witness whose evidence you consider necessary.

5. All communications, including your report, will be addressed to the Secretary to the Government of India, Army Department, Simla.

B. HOLLOWAY, *Major-General,*
Secretary to the Government of India, Army Department.

DELHI.

Terms of Reference.

1. The commission is appointed with the object of enquiring into and recording the arrangements made for the collection, treatment and removal of the sick and wounded during the operations in Mesopotamia to the date of your departure from Mesopotamia.

2. The strategical situation in Mesopotamia during the above period, and the tactical obligations arising therefrom, will be borne in mind throughout your proceedings.

3. You will distinguish clearly between the following phases:—

(i) From the battlefields to the line of communication.
(ii) Down the line of communication to Basra.
(iii) At Basra.
(iv) From Basra overseas.

4. In each phase the forecast of the preparations considered necessary; the preparations actually made; and the equipment, vehicles, stores and personnel actually available at the localities, and on the vessel, during the operations, will be investigated.

5. The amount of river transport allotted for the medical services will be examined with regard to the total amount available, and the paramount military requirements for transportation of troops, supplies and ammunition.

6. You will ascertain and record the relative order of arrival of the combatant and medical units coming with reinforcements from overseas, in order to fix the responsibility for any deficiencies in personnel, equipment and stores which could be attributed to the order of embarkation for Mesopotamia.

7. Having reviewed the foregoing considerations, your opinion is required on the following points:—

(i) As to whether the wounded and sick underwent any avoidable suffering and hardships during any of the phases defined in paragraph 3 above. If so, you will state the phase, and will ascertain and assign the responsibility, showing whether individuals or the system were to blame.
(ii) As to whether any avoidable shortage in the personnel, equipment, vehicles and stores occurred during any of the four phases defined in paragraph 3 above. If so, you will state the phase, the shortage, and the reasons for it, ascertaining and assigning the responsibility as in (i).
(iii) As to whether any shortages which may have existed have now been made good.

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APPENDIX II.

MEMORANDUM ON THE REPORT OF THE "VINCENT-BINGLEY" COMMISSION.

By General SIR BEAUCHAMP DUFF, G.C.B., G.C.S.I., K.C.V.O., C.I.E.

Origin and Object of Commission.—Late in 1915 rumours became current in England and India that the medical arrangements in Mesopotamia were unsatisfactory, particularly in regard to the reception, treatment, and evacuation of the wounded.

Early in January, 1916, arrangements were in train for the appointment of a Commission to investigate the question, but circumstances beyond my control caused delay. Eventually, however, on March 2nd, I appointed the Commission, whose report has now been received, and gave them the following terms of reference; *viz*:—

(i) The object of the Commission is to investigate and record the arrangements made for the collection, treatment and removal of the wounded and sick during the operations on the Tigris during and subsequent to January, 1916.

(ii) Throughout your proceedings the strategical situation in Mesopotamia during the month of January, 1916, and the tactical obligations arising therefrom will be borne in mind.

(iii) You will distinguish clearly between the following phases:—

(*a*) From the battlefield to the line of communication.

(*b*) Down the line of communication to Basra.

(*c*) At Basra.

(*d*) From Basra overseas.

(iv) In each phase the forecast of the preparations considered necessary, the preparations actually made, and the equipment, vehicles, stores and personnel actually available at the localities, and on the vessels, during the operations, will be investigated.

(v) The amount of river transport allotted for Medical services will be examined with regard to the total amount available and the paramount military requirements for transportation of troops, supplies and ammunition.

(vi) You will ascertain and record the relative order of arrival of the combatant and medical units coming with reinforcements from overseas, in order to fix the responsibility for any deficiencies in personnel, equipment, and stores, which could be attributed to the order of embarkation for Mesopotamia.

(vii) Having reviewed the foregoing considerations, your opinion is required on the following points:—

(*a*) As to whether the wounded and sick underwent any avoidable suffering and hardships during any of the phases defined in paragraph (iii) above. If so, you will state the phase.

(*b*) As to whether any avoidable shortage in the personnel, equipment, vehicles and stores occurred during any of the four phases defined in paragraph (iii) above. If so, you will state the phase, the shortage, and the reasons for it.

(c) As to whether any shortages which may have existed have now been made good.

I empowered them to suggest extension of these terms if they thought necessary, and they were to report to the Chief of the General Staff, for my information as Commander-in-Chief.

2. Under orders of His Excellency the Viceroy, Mr. Ridsdale joined the Commission at Basra about April 16th, and on March 29th the terms of reference, which had already been slightly expanded at the request of the Commission, were further extended by the Secretary of State to their final form; *viz*.:—

Terms of Reference.

(1). The Commission is appointed with the object of inquiring into and recording the arrangements made for the collection, treatment, and removal of the sick and wounded during the operations in Mesopotamia to the date of your departure from Mesopotamia.

(2) The strategical situation in Mesopotamia during the above period and the tactical obligations arising therefrom will be borne in mind throughout your proceedings.

(3) You will distinguish clearly between the following phases:—

(i) From the battlefields to the line of communication;

(ii) Down the line of communication to Basra;

(iii) At Basra;

(iv) From Basra overseas.

(4) In each phase, the forecast of the preparations considered necessary, the preparations actually made, and the equipment, vehicles, stores and personnel actually available at the localities, and on the vessels, during the operations, will be investigated.

(5) The amount of river transport allotted for the medical services will be examined with regard to the total amount available and the paramount military requirements for transportation of troops, supplies and ammunition.

(6) You will ascertain and record the relative order of arrival of the combatant and medical units coming with reinforcements from overseas, in order to fix the responsibility for any deficiencies in personnel, equipment, and stores which could be attributed to the order of embarkation for Mesopotamia.

(7). Having reviewed the foregoing considerations, your opinion is required on the following points:—

(i) As to whether the wounded and sick underwent any avoidable suffering and hardships during any of the phases defined in paragraph (3) above. If so, you will state the phase and will ascertain and assign the responsibility, showing whether individuals or the system were to blame.

(ii) As to whether any avoidable shortage in the personnel, equipment, vehicles and stores occurred during any of the four phases defined in paragraph (3) above. If so, you will state the phase, the shortage, and the reasons for it, ascertaining and assigning the responsibility as in (i).

(iii) As to whether any shortages which may have existed have now been made good.

At the same time the Commissioners were, under my direction, ordered to render their report to the Secretary,

Army Department, instead of the Chief of the General Staff, so as to enable me to deal with their report in my capacity as Army Member.

Throughout, and in their final form, the object of the terms of reference was to assist me in determining where there had been failure, what were the causes, and who was to blame, in India or in Mesopotamia.

I have never read, nor do I now read, the Secretary of State's instructions and additions as in any way altering the above original objects of the Commission.

3. The Commission have not followed the headings of the terms of reference in their report, though they state that the extension of these terms placed them at a great disadvantage in their inquiries.

However that may be, the result is unfortunate, since the Commission have departed from their terms of reference and embarked upon criticisms of the preparations for the campaign which were outside their purview, which they had neither the time, knowledge, nor the qualifications to discuss, and concerning which they did not even take the obvious and only just course of examining the Heads of Branches at Army Headquarters, nor of discussing with me, prior to the submission of their report, the difficulties they had experienced in adherence to their terms of reference.

In fact, the Commission have ended by reporting on the past and present action of the Government of India instead of carrying out their instructions to report to the Secretary, Army Department, for the information of myself, how certain definite arrangements had been carried out.

4. The issues they raise require reply, but up to the 17th July the appendices containing the evidence are not ready for examination, so that I cannot now deal with their value; nor does the report itself contain any explanation of their methods of receiving and appraising the evidence taken, except the general statement that the Commissioners regard the evidence given to them as confidential, which in itself is an unusual condition to make when assigning responsibility to officers by name for failure in their professional duties.

5. Until, therefore, there has been time to examine the evidence, I am not in a position to determine where the responsibility for any administrative failure lies, in Mesopotamia or in India.

I need not, however, wait for the evidence in order to review the policy which directed the campaign, so far as it is known in India, and which would determine the standard and pace of preparation of the force and consequently the forecasts to be made.

It is especially desirable to do this at once as relevant to those issues raised in the report which are outside the terms of reference, and which might be held to reflect upon my performance of my duties as Commander-in-Chief in India.

In this respect I have a two-fold outlook:

(i) As director of my staff.
(ii) As supervisor of their work.

Later, when in possession of the evidence, it will be for me to investigate the execution of my orders by the Quartermaster-General's Branch, the Royal Indian Marine, and the Medical Services, which are the three Branches of the Army Department concerned in the matter both in Mesopotamia and in India.

6. In paragraph 55 of their report the Commission admit they do not know what the intentions of His Majesty's Government were in regard to this campaign. They had the fullest opportunity of ascertaining them, but did not attempt to do so. Without such knowledge all accusations of want of foresight are really worthless. I must examine this point. I would preface my remarks by saying (*a*) that before this war His Majesty's Government required India to be ready merely for a hill campaign against a semi-civilised enemy and for that alone, and (*b*) that in the present struggle the general policy of the Empire required that all our energies, commercial, financial, manufacturing, and military, be directed towards the strengthening of our position in Europe and the North Sea. It follows that all expenditure, all utilisation of manufacturing resources, and all interference with trade and commerce not directly required by this object should be reduced to the lowest possible limits, and that the equipment of forces not employed in the main theatre should be limited to a basis calculated to enable them to carry out the settled policy of Government; and that it would have been a waste of power to prepare upon a speculative scale.

Everything in Mesopotamia, including medical arrangements, depended on the supply of river transport, and the supply of this depended on foreknowledge of the policy of His Majesty's Government, both as to the geographical points to be aimed at and the number of troops to be employed. This involves an examination of the history of the campaign.

In paragraph 5 of their report the Commission divide the campaign in Mesopotamia into four phases, *viz.*:—

(i) The landing at Fao, the occupation of Basra and Kurna and the defeat at Shaiba or Barjasiyah of the Turkish attempt to recapture Basra.
(ii) The expulsion of the Turks from Persian Arabistan followed by the occupation of Amara on the Tigris, and of Nasariyeh on the Euphrates.
[For convenience, the later operations near Nasariyeh have been included in this phase.]
(iii) The capture of Kut-al-Amara, advance to Ctesiphon and subsequent retreat to Kut.
(iv) The defence of Kut-al-Amara and the unsuccessful attempts to relieve it.

I shall now state the policy in each phase as known at the time in India, and shall then explain the preparations made in order to keep pace with this policy. Having done this, those paragraphs of the Commission's report which express their views as to essential preparation for the campaign will be compared with the facts.

It should be noted that, so far as pre-war consideration of what might be necessary in any theatre of operations north of Basra was concerned, this area was reserved for the General Staff at the War Office, and India was not allowed to collect intelligence or formulate plans thereon. I received no plans of operation from the General Staff, War Office.

7. *Phase I.—The landing at Fao, the occupation of Basra and Kurna and the defeat at Shaiba or Barjasiyah of the Turkish attempt to recapture Basra.*

The original policy of Government, as known to the Government of India, did not contemplate an advance into Mesopotamia beyond the vicinity of Basra.

On the 26th September, 1914, India was informed that the situation as regards Turkey was most menacing and was ordered to hold in readiness one brigade of the 6th Division with two mountain batteries and sappers to move to the head of the Persian Gulf

On the 2nd October secret orders to despatch this force were received, their ostensible destination being Egypt, and the transport and troops having sealed orders which were not opened until at sea.

On the 5th October, 1914, India was informed that the object of the expedition was to occupy Abadan and protect the oil tanks and pipe line.

On the 1st November the Secretary of State for India directed orders to be given for the force to attack Fao and clear the Turks out of the Shatt-al-Arab, if possible as far as Shamshumiya.

A second brigade of the 6th Division which had been prepared and despatched under orders from His Majesty's Government, reinforced the advanced portion and occupied Basra on November 22nd.

On the 23rd November, 1914, the Chief Political Officer at Basra, in a private telegram, urged an advance on Baghdad. This, however, was not supported in India.

On the 27th November the Secretary of State wired that His Majesty's Government were "not disposed to authorise an advance on Baghdad at present," but authorised an advance on Kurna.

On the 9th December, 1914, Kurna was occupied.

On the 14th December, 1914, the Secretary of State for India proposed the occupation of Nasariyeh.

On the 2nd January, 1915, India wired home stating military reasons against the movement to Nasariyeh; and on the 5th January, 1915, the Secretary of State agreed to await developments.

On the 29th January, 1915, the Secretary of State urged the sending of troops up the Karun at once for the protec-

tion of the oil-fields, and at the same time suggested the reinforcement of the force to a strength of two divisions.

On the 30th January India pointed out that the Karun and the oil-fields were a secondary objective only, and realising how greatly their responsibilities in Mesopotamia were growing, asked for the return of one of their divisions from Egypt. Meanwhile a small force was sent up the Karun.

On the 5th February, 1915, the Secretary of State told India that the War Office could give no help, but impressed on us the view that it was most important to bring the force in Mesopotamia up to two divisions.

India did not consider herself strong enough to do this without help from elsewhere but on the 5th March received direct orders to do so, it being definitely stated that the Viceroy and the Commander-in-Chief were relieved of all responsibility of possible consequences in India itself; consequently the 12th Division was hurriedly formed and despatched. This division was intended merely to strengthen the local defensive

On the 9th April, 1915, Sir J. Nixon assumed the command of Indian Expeditionary Force "D."

Our policy, then, up to the middle of April did not contemplate an advance up either the Tigris or the Euphrates beyond Kurna, and aimed only at the defence of the vicinity of Basra and of the oil-fields. The action at Shaiba and the occupation of Ahwaz were purely defensive measures due to the enemy's advance on Basra and his activity in the direction of the oil-fields area.

The Commission in referring to arrangements made in this phase give the impression (*vide* paragraphs 8 and 55) that offensive action was intended in the earlier stages of the campaign, that is, up to the end of this phase.

As shown above, such operations were not contemplated. Nevertheless, in view of possibilities, on December 30th, 1914, General Officer Commanding, Force "D," was asked by India for his requirements in river craft for use above Kurna, though he himself had not suggested any such need.

8. *Phase II.—The expulsion of the Turks from Persian Arabistan, followed by the occupation of Amara on the Tigris, and of Nasariyeh on the Euphrates.*

The policy of His Majesty's Government during this phase was still one of caution and in essence defensive. The operations, which included those in Arabistan, the advance to Amara and that to Nasariyeh, were designed merely to secure our hold on Basra and the oil-fields.

On the 24th April, 1915, the Secretary of State laid down that an advance beyond the then theatre of operations would not be sanctioned by Government at present; that during the summer we must confine ourselves to the defence of the oil interests in Arabistan and of the Basra *vilayet;* that he would be prepared to sanction an advance to Amara, with a view to adding to the security of the pipe line, should such an advance be possible after smashing the enemy in the direction of the Karun and should it receive the support of India; that, however, any plan involving undue extension and possible demands for reinforcements was to be deprecated; that a safe game must be played in Mesopotamia.

On the 23rd May the Secretary of State sanctioned an advance on Amara, on the condition that no reinforcements were necessary for this.

On the 31st May the movement commenced and Amara was occupied on June 3rd.

On the 11th June General Nixon showed the necessity of occupying Nasariyeh for the effective protection of the Basra *vilayet*, and asked if an advance thither required the sanction of the Secretary of State.

On the 13th June India informed the Secretary of State of General Nixon's proposal to move on Nasariyeh and supported it.

On the 22nd June no objection having been raised by the Secretary of State, India informed General Nixon that he had full liberty of action with regard to advancing on Nasariyeh. Nasariyeh was occupied on the 25th July, 1915.

Paragraph 85 of the Commission's report, in taxing India with lack of foresight, implies that during this Phase II an advance to Kut-al-Amara, an advance beyond that place to Baghdad, and the despatch of reinforcements from oversea to Mesopotamia, should all have been foreseen, and preparations should have been made to meet such developments. It will be seen from the summary above that the policy of His Majesty's Government in regard to such an advance was quite indefinite and appears to have been guided by the situation rather than by an ultimate objective. If this is so, then preparations for a contingency which was not communicated to the Government of India could hardly be justified.

9. *Phase III.—The capture of Kut-al Amara, advance to Ctesiphon and subsequent retreat to Kut.*

Government policy in this phase cautiously sanctioned an advance to Kut-al-Amara and then, after the capture of that place, aimed boldly and without warning at the occupation of Baghdad.

On the 26th July, 1915, India proposed to the Secretary of State the occupation of Kut for strategical reasons and suggested that for this purpose a reinforcement of one brigade from Aden be sent to Force "D."

On the 30th July the Secretary of State wired that no reinforcements could be spared for Mesopotamia; that a cautious strategy was necessary; but that the strategic importance of Kut was recognised.

On the 2nd August General Nixon emphasised the advantages of occupying Kut. In this telegram General Nixon gave no indication of any anxiety as to his ability to carry out the operation or of any difficulty likely to be experienced owing to the shortage of river craft.

On the 4th August India informed the Secretary of State of General Nixon's views and supported him.

On the 7th August the Secretary of State sanctioned an advance on Kut.

On the 29th September, 1915, Kut-al-Amara was occupied.

After pursuing the Turks through Kut, General Nixon on the 3rd October stated that he proposed to concentrate at Aziziyeh, a good deal further up the river, with the intention of opening the road to Baghdad, for which object he considered his force was sufficient; and next day he asked whether he was to be reinforced by a division from France in order that his position at Baghdad might be maintained.

The question of an advance on Baghdad now suddenly came into prominence for the first time as a live possibility.

Much telegraphic correspondence between England, India, and General Nixon ensued, until on the 23rd October the Secretary of State wired to India that if General Nixon was satisfied that the force he had available was sufficient for the operation, he might march on Baghdad, and that two divisions would be sent to him as soon as possible. On the 24th October this telegram was repeated to General Nixon.

The effect of the indefinite policy underlying these three phases was:—

While operations were confined to the vicinity of Basra no special arrangements for the supply of river craft were made, for they were not required. General Barrett was asked on the 30th December, 1914, to report the number of craft he would require in the event of an advance, and his demands were completed by the end of May, 1915.

While the change in policy underlying the advance to Kut was under consideration, it was realised that the river fleet would have to be augmented considerably by vessels constructed in England and orders were placed in August, 1915.

An indication of the attitude of the Home Government at this time will be seen in the Secretary of State's proposal on the 7th September, 1915, that the number of steamers ordered from Home should be reduced in view of the probable towing capacity of the new naval gunboats, which turned out to have no such capacity.

Later, when the impending arrival of large reinforcements to support the policy of an advance on Baghdad demanded immediately large reinforcements of river craft, any class of river vessel at all suited to the river had to be taken up and despatched.

It is obvious that while the requirements in river craft depended on decisions in regard to policy, and had to be met from a distance, whether from India or home, ready made or built to specification, supply could not keep pace with rapid changes of policy.

This seems to have been lost sight of by the Commission in their remarks in paragraph 85, which appear to have reference to this third phase in particular.

10. *Phase IV.—The defence of Kut-al-Amara and the unsuccessful attempts to relieve it.*

Policy in Mesopotamia during this period centred upon the relief of Kut. During this period, in addition to the two divisions from France which arrived in Mesopotamia in December, 1915, and January, 1916, and of which the fighting troops arrived greatly in advance of their medical organisation, the following reinforcements joined Force "D":—

34th Infantry Brigade	From India.
35th Ditto	
36th Ditto	
1 Cavalry Regiment	
1 brigade, Royal Field Artillery ...	
13th British Division	From Egypt.
No. Mountain Artillery Brigade (Indian)	
37th Infantry Brigade	From India.
41st Do.	
42nd Do	

This increase to the force of the equivalent of practically 3 divisions naturally necessitated an increase in all transport and administrative arrangements. River transport, as before, was the most important item, and, as has been shown, was procurable only from India, of which the resources in this respect were becoming exhausted, or from Home after a considerable time.

The maintenance transport, in fact, could not be obtained, constructed and sent to the Tigris in time to keep pace with the increase of requirements.

11. Our difficulties in India throughout have been that the direction of the campaign in Mesopotamia has rested in London, and that we never could foresee the advances that might be ordered or the additional troops that might be allotted to the Tigris campaign. Working in semi-darkness we have produced results which I do not claim as satisfactory, but of which, when all the circumstances are known, India has reason to be proud rather than ashamed.

BEAUCHAMP DUFF, *General,*

Commander-in-Chief in India.

Simla, July 18th, 1916

APPENDIX III.

ACCOUNT OF THE MEDICAL ARRANGEMENTS, ETC., DURING SIEGE OF KUT-AL-AMARA.

By Colonel P. HEHIR, C.B., M.D., I.M.S.

THE DEFENCE OF KUT-AL-AMARA.

(*a*) PERIOD FROM DECEMBER 4TH, 1915, TO APRIL 29TH, 1916.

1. The following statements are made from my personal diaries and rough notes that were made for the Medical and Sanitary Report of the Defence of Kut.

Duration of Siege.

2. The siege of Kut-al-Amara lasted from December 4th, 1915, to April 29th, 1916– 147 days.

Brief Description of Kut-al-Amara.

3. Kut-al-Amara is a small town on the left bank of the Tigris consisting of a dense collection of houses and huts built more or less promiscuously. The town contained about 650 houses, including 200 shops, several cafés and a few wool-presses. The better-class houses are built of burnt brick, but the majority of the habitations are larger or smaller mud huts. The main part of the town and most of the well-constructed houses stand near the bank of the river, but leave a broad river front.

The town is situated about half-way down the descending limb of a deep bend in the river. The area it covers is roughly oblong in shape, its length about 1,000, its breadth 600 yards. The distance between the south-eastern boundary of the town and the lowest part of the bend is about 300 yards.

4. There is no drainage system to the town. Each house has in the central yard a deep soakage pit, the refuse house water reaching it through a hole in the surface; it acts on the principle of a septic tank and is cleared out twice a year or so. Many of the houses have likewise a privy connected with a subterranean cess-pit which is often only 5 to 10 yards from the shallow house-well, the water of which is brackish and impure.

5. The Covered Bazaar, which contained several of our hospitals, consists of a series of intercommunicating colonnades with roofs, and a large number of small stalls. Its main avenue runs East and West, which joins another running North and South near the river front. On both sides of each colonnade are rows of small cubicles each of which accommodated from four to six patients.

6. On the North-West and South-East of the town there are date plantations and orchards of oranges, lemons, figs, peaches and pomegranates, and what used to be extensive vegetable gardens.

7. This town was the most insanitary place we occupied in Mesopotamia. The whole of the interior of the town, including the streets and lanes, the banks of the river and the surrounding area for a distance of 250 yards, were made use of as latrines, the surfaces of the streets and bye-lanes were the urinals. The town refuse was never systematically collected, and on our arrival to some extent blocked the roads and thoroughfares; mounds of it existed on the banks of the river and immediate confines of the town. No sanitation had been attempted.

8. The salient places of the defended area were: The town itself, the brick-kilns to the East of the town, the Old Fort about two miles North-East of the town, the line of block-houses extending from the Fort to the beginning of the descending limb of the bend running roughly from East to West.

9. Our defences extended from the fort on the left bank along the line of the four block-houses to the same bank, 1½ miles to the North-West of the town; this line roughly corresponded with our first line trenches, the second line trenches and reserve troops trenches being echeloned parallel to them in the rear. On the left bank of the river along the whole bend were a series of pickets in trenches covering the right bank. The guns of the different batteries were located at the brick-kilns, in front of these kilns and behind the trenches in the North-West Section, others being on the left bank near the town and on the barges. On the right bank, almost opposite the North-West angle of Kut is the village of Wool-Press which was occupied by two battalions of Indian Infantry; this force was, when necessary, supplemented by half a battalion British Infantry; its trenches were on the North-West and South of the village.

10. The enemy occupied trenches along the whole of the North-East, North and North-West front, also along the right bank around the village of Wool-Press and along the South and East of Kut opposite the fort. Enemy snipers operated from the whole of the right bank in the vicinity of Kut and the fort, except the part at Wool-Press and the bank of a few hundred yards North and South of it.

11. From December 5th the town of Kut was shelled more or less practically every day; periodically there were heavy bombardments; sniping was perpetual day and night, and high-explosive bombs were dropped from aeroplanes occasionally.

Strength of the Defence Garrison.

12. The garrison consisted of the 6th War Division with the 30th Infantry Brigade, one Howitzer and two heavy batteries.

The garrison on December 8th, 1915, was made up of the following:—

British Officers	206	Effectives.
,, rank and file ...	2,276	
Indian Officers	153	
,, rank and file	6,941	
Followers (about)	3,500	
	13,076	
In Hospitals:—		
British Officers	12	Sick and Wounded
,, rank and file ...	258	
Indian Officers	22	
,, rank and file ...	1,176	
Followers	42	
	1,510	
Total to be rationed ...	14,586	

13. The civil population of Kut at the commencement of the siege was roughly 6,400; at the end of February, 1916, it was 6,225, made up as follows: –

Natives of the town:	
Men	1,538
Women and children ...	3,803
Immigrants from Makina Village (called by us Wool-Press) ...	504
Maheillah men	316
Coolies (S. and T. employees) ...	64
	6,225

Location of the Troops.

14. The infantry force was distributed as follows:— (1) One brigade occupied the Fort and trenches to its North and North-West; (2) another the trenches extending from the left of the above, Westwards to the river bank forming the North-West Section; (3) one formed the reserve; (2) and (3) relieved each other weekly; (4) half a brigade guarded the town and picketted the bend, its other half being quartered in Wool-Press village on the right bank opposite the North-West angle of Kut.

15. The following were located in and near the town; two Indian infantry units and Headquarters of Division and Brigades, with followers, all billeted and numbering 1,200; General Hospitals, Field Ambulances, Indian Stationary Hospital, personnel and patients, in billets— 2,100; General Reserve in camps and dug outs (on the North, North-East and East of the town), 1,800.

16. The troops on the right bank were cut off from Kut; and the only means of intercommunication were the steamer and motor launch which crossed at night with rations, and returned with any sick and wounded requiring admission into hospital.

State of Troops on arrival at Kut.

17. The 6th Division had gone through a severe hot weather, and an outbreak of malaria in Lower Mesopotamia, had experienced exceptional hardships, and privations for 17 days preceding the siege, and arrived in Kut in an exhausted state as will have been seen from the itinerary given in my statement for the period (*c*). During the early stage of the siege, the preparation of

the defence works threw a large amount of physical labour on the troops who were already in a somewhat worn-out condition.

General Health of the Garrison.

18. After arriving in Kut, the general health of the garrison up to the middle of January improved, especially that of British troops. It then remained fair up to the end of February, after which it gradually declined to the end of March, particularly in Indians. Up to this time the men were moderately cheerful and in fair spirits. One saw, however, how deeply they were disappointed each time the relief failed. From this time onwards there was a rapid lowering of stamina, vitality, physical condition and health generally to the end of the siege. When Kut capitulated the whole garrison was in an exceedingly low state of health.

19. During the last month of the siege, men at fatigues, such as trench-digging, after ten minutes work had to rest a while, and go at it again; men on sentry-go would drop down, those carrying loads would rest every few hundred yards; men availed themselves of every opportunity of lolling about or lying down. There were instances of Indians returning from trench duty in the evening seemingly with nothing the matter, who laid down and were found dead in the morning -death due to starvation asthenia. Men in such a low state of vitality can stand little in the shape of illness—an attack of diarrhœa that they would have got rid of in a day or so at the beginning of the siege, often ended fatally—all recuperative power had gone. At the end of the siege I doubt whether there was a single person equal to a five-mile march carrying his equipment. Personally up to the middle of March I could make a complete inspection of the front line trenches and Fort (about 5 miles) in the morning; I had then to halve it, and at the end of April while doing even half, I had to rest on the way. Practically all officers were in the same condition of physical incapacity

I make the following extracts from my diary:—

20. "30.12.15. Had a long conversation with the G.O.C. Division, regarding the present fighting capacity of the Force now at Kut. I strongly represented what the Force went through anterior to the battle of Ctesiphon and what they have endured since the siege began. I put the sick and wounded that will require evacuation down river at 2,000, and that at least 20 per cent. of the remainder will not be fit for active military operations for some time to come."

21. "20.1.16. The general health of the British troops has greatly improved; the men are looking well and many are putting on weight. There have been no fresh cases of beriberi for over a fortnight. The Indian troops are in better health then when they arrived here, but are fining down and not regaining stamina in the same way British are; this is due to: (1) absence of meat rations; (2) absence of potatoes and other vegetables; and (3) short allowance of atta"; further, they were less capable of standing the severe climatic conditions than the British, and as they were getting no meat or vegetable ration, they never recovered stamina.

22. On January 28th. I recommended to the G.O.C. Division that the reliefs in the trenches should not be prolonged beyond a week, because in the Kut bivouacs; "(1) men can get clean, and to a limited extent wash clothes; (2) they get their meals hot and have greater opportunities for supplementing rations by local purchase; (3) they get more rest and less exposure in covered bivouacs."

23. There were at first difficulties connected with feeding the troops in the trenches, especially in serving their meals hot, but every effort was made to overcome these. During the latter half of the siege practically all the troops in the firing line had their kitchens in the immediate vicinity of the trenches.

24. "On January 18th, 19th, and 20th, the 2/7 Gurkhas experienced overwhelming hardship. They were up to their waists in water in the trenches and when they came into their dug-outs in Kut on the 22nd they were absolutely done. A large number had swollen hands and feet due to blood stasis, and three men appeared to have collapsed and died from the 'effects of cold.'" When I inspected the battalion on January 26th they were better, but "looked very tucked up."

25. "April 5th, 1916. I have during the last week specially noted the rapid way in which all the young soldiers and recruits are fining down on the present very scanty rations."

26. On April 8th I entered in my diary: "I was markedly struck this evening with the change that has taken place in the 7th Rajputs, 76th Punjabis and 24th Punjabis; the men have lost flesh considerably during the last week; they are debilitated and somewhat apathetic, and whenever opportunity arises lie down; they look half starved. Sickness occurring in men in this state, if at all serious, is fatal, or at least dangerous to life." This prediction was unfortunately only too fully borne out during the remainder of the siege and even more emphasized after the fall.

27. On April 18th I noted: "There is a vast amount of suffering from hunger amongst the troops which is being borne with admirable patience and fortitude, and arouses enthusiastic praise at the pluck and grit displayed by both our British and Indian soldiers. As one is amongst the men daily one speaks with intimate knowledge of the conditions; the behaviour of the men in meeting these unfortunate conditions is heroic."

28. Between April 11th and 18th, 1916, I carried out a series of observations as to the effects of the semi-starvation on our British and Indian troops; these are dealt with in a special memorandum which I submitted under the title *State of Nutrition of the Kut Garrison between the 11th and 18th April*, 1916, to the Chief of the General Staff India, and it was sent home as a special despatch. The paper is a scientific one dealing with the intimate physiological processes in the human economy during starvation; and it gives details regarding the low state of health of the Kut garrison at the time.

29. The British soldiers lost on an average, one stone in weight; Indians, about 20 lbs. In all the temperature was on an average 1.8° Fahr. below normal; in Indians it was frequently found to be between 95 and 96° Fahr.

30. At the beginning of April the duties of all brigades were made as light as possible, and sentry-go was reduced to one hour at a time.

31. In my inspections of the front line trenches during March and April, life was much healthier in the trenches than in the town and I was most favourably impressed with the excellent weather the troops enjoyed in them, the purity of the air, and the absence of smells and flies, to say nothing of the peaceful calm and freedom from the enemy's attentions.

32. The behaviour of the troops throughout the siege was splendid. The defaulter's sheets of the British soldier was a *carte blanche*, and there was no grumbling; there was almost a complete absence of suicide and insanity.

Disease and Wounds.

33. There were in Kut anterior to our arrival, 2,201 sick and wounded:—

British Officers	21
„ ranks	411
Indian Officers	29
„ ranks	1,665
Followers	40
Turkish wounded	35

Of these 709 were despatched down river on December 4th, 1915, leaving 1,492.

34. The total number of patients treated in the hospitals during the siege (excluding Arabs) was 7,423, including 2,446 wounded, and 4,977 sick.

35. The *wounded* were distributed as follows:—

British Officers	54
„ rank and file	456
Indian Officers	28
„ rank and file	1,531
Followers	377

The admissions for *disease* were:—

British Officers	118
„ rank and file	1,090
Indian Officers	49
„ rank and file	3,054
Followers	666

The daily average number treated in the hospitals was 1,351.

36. There were in addition about 4,100 Arabs (663 wounded, 3,437 sick, men, women and children) treated by our medical units; 247 Arabs (102 men, 54 women, and 91 children) were killed or died of wounds inflicted by the enemy.

37. It is necessary to emphasize that these figures are in no sense a measure of the state of health of the garrison. The accommodation in medical units was limited to about 1,450, the medical staff in them was small and many patients were discharged in a convalescent state to be looked after by the medical officers of corps units. We were also compelled to have the less severe cases that would ordinarily be sent to field ambulances or general hospitals treated regimentally to equalize the work of the available medical officers and subordinates.

38. A convalescent depôt for British troops was established in the Serai to relieve the pressure in the British General Hospital and the field ambulances.

Principal Diseases.

39. *Scurvy* caused 1,050 admissions, all in Indians. From an early stage in the siege I was apprehensive regarding the disease in Indian troops and followers. A few cases appeared in the middle of January, and the incidence gradually rose; in the middle of February we had 140 cases, the daily accession being about five, and at the end of March there were 579 cases, after which it gradually declined. Excepting the effects of starvation nothing undermined the health of the Indians more than scurvy. It occurred in three forms fully developed, incipient and latent. The disease arose from long-continued improper and insufficient food, especially the absence of fresh vegetables and fresh meat from the diet. It was greatly predisposed to by the prolonged hardships, exposure, heavy duties, and the generally depressing influence of the siege. We found we could not prevent it, but if brought under treatment early we could cure it. All our patients were better off in food supplies than the troops at duty, as they included a limited amount of milk, cream, eggs, rice, dhall, lime-juice, pickles, canned fruit and tamarind. Indian units that were quartered in the Fort, and North-East Section, and at Wool-Press village, suffered inordinately from scurvy due, it was considered to their not having free access to the supplementary articles of food purchasable in bazaars. Indians that ate horse-flesh from the time it was commenced were decidedly less affected, and in those in whom the incidence was high, it underwent reduction when this meat was eaten, providing its consumption was not postponed too long. Most Indians who did not eat horse flesh before April 1st, could not digest nor assimilate it, and in many it led to gastro-intestinal troubles; nevertheless I am quite confident that it kept many of them alive. Nor did those who ate horsemeat early run down so rapidly as those who did not. Green herbs collected from the alluvial plain had a marvellous effect in keeping down the incidence of the disease.

40. On February 23rd, 1916, I wrote:—"We cannot prevent the occurrence of the disease (scurvy) in units that will not eat horse-flesh, but we can cure the disease rapidly in the medical units (if the men are sent in early), as we have at least eight items that cannot be obtained regimentally—dhall, rice, fresh milk, eggs, pickles, *imli*, (tamarind), chatni and chloride of calcium." From February 27th, we got in all incipient and suspicious cases.

41. The total number of admissions for *dysentery* was 684. It afflicted Indian troops and followers much more than British soldiers. It was one of the most prevalent and serious maladies dealt with. It was a particularly fatal terminal complication in a number of scurvy cases.

42. There were 551 cases of *malaria*; it was relatively more prevalent in British troops than Indians. These were all relapses of old infections. It was observed that in Indians previous malarial infection predisposed to scurvy.

43. *Gastro-enteritis* and *Diarrhœa* gave rise to 528 admissions into hospitals. It was one of the most prevalent disorders during the Defence; another 1,300 odd cases were treated regimentally. Practically everyone got it at one stage or another of the siege, and in many it was chronic. It was attributable to many causes, such as chills, night exposure, coarse and imperfectly cooked food, etc.

44. During the last five weeks of the siege there were 165 deaths from conditions variously diagnosed as gastro-enteritis, enteritis, diarrhœa, etc. The essential cause in these cases was undoubtedly starvation. The men had got into such a state of debility and wasting from shortage of food, that any added strain on the economy, such as diarrhœa, was sufficient to lead to speedy dissolution. In all these cases there was finally a marked subnormal temperature. The condition was clinically identical with cholera; but neither I nor any of the Medical Officers had any doubt about its not being cholera. This disease continued epidemically after we got to the Prisoner's Camp, Shamran; during the month of May we had over 1,500 cases, and about 180 deaths from it. I got the malady myself; after the first few hours it was quite painless, and one passed into an apathetic condition.

45. *Pneumonia* (487 admissions) was one of the most serious and fatal diseases, especially in Indian troops, throughout the siege. It was largely predisposed to by the intense cold at night in January and February, exposure in trenches, and in March and April breathing of germ-laden dust, and the more or less lowered stamina.

46. We were fortunate in having no infectious disease. In the early stage of the siege a recrudescence of beri-beri amongst British troops gave rise to some apprehension, but it then disappeared; whilst in Indian troops and followers during the latter half of the siege scurvy caused anxiety.

47. The following table gives the numbers of deaths in Kut from December 4th to April 28th, 1916:—

	Killed.	Died of Wounds.	Died of Disease.	Totals.
British Officers ...	9	10	4	23
,, ranks ...	84	105	58	247
Indian Officers ...	8	7	5	20
,, ranks ...	369	278	531	1,178
Followers	67	88	123	278
	537	488	721	1,746

48. On March 18th, an aeroplane H.E. bomb dropped in the British General Hospital, killed 6, and wounded 26 British N.C.Os. and men; 12 others of the 26 died from their injuries.

Climatic Peculiarities During Defence.

49. During the siege the climate up to the end of March may on the whole be classed as wintry and comparable with that of the North-West Frontier of India for the corresponding period. In the months of December, January and first part of February, it was very cold; from January 15th to February 8th it froze every night; the troops in the trenches, especially Indians, found this very trying. The effects were intensified by severe winds and rain storms. On January 18th, 19th, and 20th, the trenches were flooded with water at ice temperature. On January 20th, several units in the first line trenches were up to their waist in water, and about 30 Indians were brought out of the trenches collapsed from the cold; in a few cases the men could not be resuscitated. At this stage frost-bite was common, which in some men led to gangrene of the toes, and trench rheumatism was prevalent. The lowest temperature reached was 24·8° Fahr., on January 31st. After the middle of February the days were warmer, and the night cold less severe. In March there was about ten days cold weather associated with rain; but the days were mostly bright and pleasant. In April the nights were pleasant, and the days becoming hot, but not uncomfortably so.

50. About 4 inches of *rain* fell during the siege—½ inch in December, 1½ inches both in January and February and ½ inch in March. The heaviest rainfall was from January 18th to 21st, during which time the troops in the trenches suffered considerable hardship. The rains occurred in torrential tropical downpours, usually followed by a break lasting a week or two. During the rainy periods the roads in the town were converted into elongated puddles from 6 to 12 inches deep making traffic difficult.

51. On January 18th I wrote in my diary:—

"Torrential rain fell for several hours during the night January 17th and 18th. All the trenches were swamped with water; the troops endured a most miserable night in the rain.

"The streets of the town are one continuous puddle several inches deep. The trenches in first, middle and second lines have from 1 foot to 2 feet of water in them. Pumping has had but little effect. Troops are making a continuation trench to the river and lower ground to drain them. Kit and bedding all soaked."

Medical Units in Kut during the Siege.

52. (*a*) No. 3A British General Hospital. ½ Section (50 beds); (*b*) No. 9 Indian General Hospital. 1 Section

(100 beds) complete; (*c*) No. 57 Indian Stationary Hospital (200 beds) complete; (*d*) No. 2 Field Ambulance. 2 British and 3 Indian Sections. (*e*) No. 4 Field Ambulance. 1 British and 2 Indian Sections complete; (*f*) No. 106 Field Ambulance. 1 British and 3 Indian Sections. (*g*) No. 9 Advanced Depôt of Medical Stores complete.

(*a*), (*b*), (*c*), and (*e*) were in Kut when we arrived.

(*a*) had 2 medical officers and 2 assistant surgeons.

(*b*) had 2 medical officers, 1 assistant surgeon and 2 sub-assistant surgeon.

(*c*) had 2 medical officers and 2 sub-assistant surgeons.

(*d*) had 5 medical officers, 3 assistant surgeons and 3 sub-assistant surgeons; much of its equipment was abandoned at Ctesiphon. One medical officer died, and 1 sub-assistant surgeon was killed during the siege.

(*e*) had 3 medical officers, 1 assistant surgeon, and 2 sub-assistant surgeons.

(*f*) had 4 medical officers, 3 assistant surgeons and 2 sub-assistant surgeons; some of its equipment was abandoned at Ctesiphon.

53. No. 2 Field Ambulance received the sick and wounded of the 16th and 17th Brigades, No. 106 of the 18th Brigades, No. 4 of the 30th Brigade and Divisional troops; the British General Hospital admitted the more severe cases occurring in British Units, and all British Officers, the Indian General and Stationary Hospitals the worse cases of all Indian units and followers.

54. The British General Hospital was expanded to 200 beds from December 4th, 1915.

Wounded and sick Arabs were mainly treated in No. 106 Field Ambulance, but in emergencies were treated in the nearest hospital.

55. On December 8th, I issued an order that the "field ambulances are to admit all the slight and less severe cases of sickness and wounds." With regard to the sick this could not be adhered to completely, for when the General Hospitals became congested the field ambulances had to retain many cases of serious illness.

56. Normally the above-named medical units are equipped and staffed to deal with a total of 650 patients. The daily average number of sick and wounded under treatment was 1,351. The General and Stationary Hospitals were short of their usual number of medical officers and medical subordinates. A large part of the equipment of Nos. 2 and 106 Field Ambulances had to be relinquished during the withdrawal from Ctesiphon.

57. The staff attached to these units included:—

18 Medical Officers (1 died).
10 Assistant Surgeons (1 died).
11 Sub-Asst. Surgeons (1 killed).

As five medical officers, two assistant surgeons and one sub-assistant surgeon of corps units were killed or wounded at Ctesiphon their places had to be partly filled from the above staff. During the siege one medical officer (regimental) was killed and one died, one assistant surgeon (regimental) was killed and one died, and one sub-assistant surgeon was killed, while on an average 20 per cent. of the medical officers and medical subordinates were on the sick list, so that the work thrown on the remainder left for duty was exceedingly severe and carried out under exceptional difficulties. On January 23rd, 1916, we had eight medical officers on the sick list, and on the 28th of the same month, nine. Seldom had we less than four. Some of the medical officers and subordinates previously attached to the different units were, just before the siege began, sent down river with convoys of wounded after the battle of Ctesiphon, and their services lost to the Defence.

58. The perpetual sniping on the part of the enemy and his daily but irregular shell fire necessitated the admission of the wounded into the hospitals at all hours of the day and night: these cases had on several occasions to be dressed and operated on during the enemy's bombardment.

59. There was a constant interchange of medical officers and subordinates in the hospitals. When work of one got very heavy one or more medical officers were transferred temporarily from the field ambulances, whilst medical officers of corps units gave their services for several hours daily.

60. The menial establishment was insufficient. We obtained several British privates to act as cooks and nursing orderlies in the hospitals, and Indian soldiers to act as ward orderlies and help in the cooking; convalescents also assisted in these functions.

The shortage of sweepers was made good from brigades, the units of which had under existing circumstances a superabundance.

61. Statement Showing Number of Personnel by Classes Attached to Medical Units of 6th Division in Kut-al-Amarah on April 26th, 1916.

Unit.	British Officers.	Assistant Surgeons.	Sub-Asst. Surgeons.	Pack Store Sergeants.	Pack Store Havls.	Nursing Orderlies.	Ward Orderlies.	Army Bearer Corps.	Army Hospital Corps.	Supply and Transport.	Total.
										Personnel	
No. 2 Field Ambulance	4	3	2	1	3	5	3	200	18	23	262
No. 4 Field Ambulance	3	1	2	1	1	4	–	54	20	2	88
No. 106 Field Ambulance ...	4	3	2	–	–	2	5	94	13	21	144
British General Hospital	2	2		–	–	23	–	14	18	14	73
Indian General Hospital	2	1	2	–	1	–	10	16	–	28	60
Indian Stationary Hospital ...	2	–	2	–	4	–	8	23	5	25	69
Total	17	10	10	2	9	34	26	401	74	113	696

Location of the Medical Units.

62. As soon as we reached Kut I went round the town to select buildings for the hospitals as the position of the General Hospitals and field ambulances was dangerous. There were only two large places suitable for hospitals, the Serai and the Covered Bazar. The Serai, situated at the North-West angle of the town, was directly exposed to both rifle and gun fire. The Covered Bazar, which could roughly hold about 1,000 patients, was selected for the British and Indian General Hospitals, the Indian Stationary Hospital and No. 106 Field Ambulance. It took 200 men two days to clean it up and make it habitable for patients

63. The four great defects of the Covered Bazar as a hospital were: (*a*) Leakage to a certain extent during the rain; this was periodically attended to by the engineers; (*b*) the thoroughfares became converted into a puddle after each heavy shower; remedied by partial rough paving with brick; (*c*) dust in dry weather, and (*d*) exposure to enemy shell-fire.

64. The accommodation of all the medical units was indifferent, but it was the best that could be provided, and it was to some degree satisfactory that all the sick and wounded could be billeted throughout the siege.

Anterior to the commencement of the siege the British and Indian General Hospitals were in reed and mat huts supplemented by tents and located to the North-East of the town; the Indian Stationary Hospital in tents in the same vicinity; No. 4 Field Ambulance was encamped in an orange grove to the North of the town, and close to it was No. 9 Advanced Depôt of Medical Stores. These positions were very exposed to the enemy's fire.

65. On arriving in Kut, the field ambulances of the 6th Division were encamped in the orchards between the

General Hospitals and the town. The position was exposed to both gun and rifle fire, and on December 5th, all field ambulances were billeted in the town, No. 2 in Third and Fourth Avenues, No. 4 in Signal Lane and No. 106 at the Southern part of the Covered Bazar. No. 131 Cavalry Field Ambulance, located in the same grove, left with the cavalry brigade on the morning of December 6th, 1915. The Advanced Depôt of Medical Stores was housed in No. 3 Avenue.

A few hours after all patients had been removed from the huts and camps, the enemy commenced shelling that quarter heavily.

66. *The Officers' Hospital* (which was part of the British General Hospital), consisted of two double storied houses in No. 2 Street. The accommodation was bad, especially in the ground floor, and at one time when there were over 30 officers being treated, it was overcrowded. They were, however, in a safe position, as neither block was hit by a shell throughout the siege.

67. Red Cross flags were hoisted over all the hospitals; in the Covered Bazar their positions defined the limits of where the hospitals were. The Covered Bazar extends over two acres of ground, and was bounded on the North by our Ordnance Park, and on the West (bank of river) we had 4 guns; we had about 95 shells into it. When aeroplanes began dropping high explosive bombs, specially large red cross emblems were laid flat on the roofs of all the hospitals, the white ground of the emblem being 16 feet square, and the limbs of the red cross 2½ feet in width and about 8 feet in length.

68. During the siege 103 of the enemy's shells, and 3 aeroplane bombs entered the hospitals killing 38 and wounding 42 patients, and killing 42 and wounding 36 of the personnel of the medical units; 11 of the hospital personnel were also wounded by snipers.

69. The general hospitals were used for the treatment of all severe wounds, and, as far as practicable, for cases of serious illness. The work in both these institutions was carried out under high pressure throughout the siege. The Indian Stationary Hospital was also overworked.

70. There were occasions when the strain thrown on the hospitals was overwhelming; *e.g.* on December 24th, No. 2 Field Ambulance was treating 202 sick, and 174 wounded, No. 4 (3 Sections) 40 sick and 177 wounded; No. 106 (4 Sections) 84 sick and 103 wounded, the British General Hospital (½ section) 112 sick and 93 wounded. The Indian Stationary Hospital had at one time 546 sick, and the Indian General Hospital (1 Section), 156 sick and 171 wounded.

71. I find the following entry in my diary for December 21st, 1915: "*Indian General Hospital.* The work here is under high pressure. One of the S.A.S. now ill and only 2 left to whole hospital. When an operation case comes in (now that Captain Barber is ill), all dressing of other cases has to cease. If possible have a regimental S.A.S. to assist."

72. "*Indian Stationary Hospital.*—316 cases under treatment. Of these 254 wounded. Here also work is at high pressure. O.C. (Major Bose) is crippled with a dilated heart and tachycardia.

73. "*No. 106 Field Ambulance.*—The work in this unit is very considerable. In addition to treating the 18th Brigade, they treat from 50 to 60 (men, women and children) of the civil population, and several of these wounded. At present both Major Pearson, O.C. and Capt. Puri are ill, and Major Aylen has charge of the Officers' Hospital.

74. "*No. 2 F.A.* Work in this unit is also under high pressure. There are 63 British and about 200 Indian sick. Major Lambert is ill, and there are only 2 S.A.S."

The medical personnel were getting worn out from overwork.

75. "December 28th, 1915. The general care of the sick and wounded and dressing, and the sanitation of the hospitals are as satisfactory as can be expected under the circumstances."

76. "January 1st, 1916. Sick and wounded coming in from the trenches in a most deplorable and miserable state—clothes wet and saturated with water and mud, and they are cold and shivering."

77. "January 28th, 1916. The hospitals are feeling the shortage of nursing and ward orderlies on account of the numbers of sick and wounded."

78. About the end of February the "cases of sickness did not respond to treatment as they used to do, which was attributed to the men's resisting power being lowered."

79. Great difficulty was experienced in connection with the supply of kerosine oil to hospitals from January 15th. It was then arranged that it be "limited to night hurricane lamps and the operation theatres. General wards to use heavy oil." (A large number of jam tins were converted into lamps for burning heavy oil.) The operating theatres were fitted up with acetylene lamps by the Flying Corps.

80. The shortage of fuel at one stage in January led to some difficulty in the sterilization processes necessary for surgical cases. This was remedied at once, and a special allowance of fuel sanctioned for the purpose.

On February 6th there were "50 cases of pneumonia under treatmen in the Indian General Hospital" alone.

81. About March 20th parados were made in the British General Hospital and other medical units to prevent the effects of shell fire and bombs.

82. The *sanitation* of the hospitals was defective in many respects, especially during the rainy periods, but I believe it was carried out as satisfactorily as the circumstances allowed of. Night soil was partly incinerated and partly buried in deep pits. The water-supply arrangements were the best in the garrison and there was practically always sufficient water for drinking, cooking, and washing, but not for bathing. The plan of supply was: Several 200-gallon iron tanks were placed on platforms within the front shed of the Covered Bazar about 60 yards from the left bank of the river. A pump in a covered place on the river bank was connected by a hose (laid along a trench) with the tanks. From these front tanks the water was drawn and distributed to other tanks suitably located in each medical unit. Several adjacent combatant units got water from here. All water was chlorinated.

83. The conditions taken together were decidedly unfavourable for the sick and wounded. It was impossible for the available medical staff to give the patients all the care and attention they required. The improvised hospitals, especially those in the Covered Bazar were defectively ventilated, ill-lighted, and finally unhygienic generally. The patients were going through a process of slow starvation and we had but a limited amount of hospital comforts for them, indeed, at the last stage, practically none. Added to these were the depressing influences of daily shelling and of disappointed expectations as regards the relief.

Contraventions of the Geneva Convention.

84. (*a*) Shelling of hospitals. During the siege 103 shells entered the various hospitals. Seven 40-pound shells entered the Covered Bazar Hospitals on December 10th, 1915.

(*b*) Bombing of hospitals. Three bombs entered the hospitals, one bomb killing 18 and wounding 14 men.

(*c*) Killing of women and children while drawing water by snipers.

85. Regarding (*a*) and (*b*). It is only fair to state that we had four guns on the West and within 100 yards of the Covered Bazar and the Ordnance Park within 50 yards. The Turkish aviator who dropped the bomb on the British General Hospital subsequently apologised to me for doing so, and expressed his profound regret for what had happened.

Positions of Dressing Stations, etc.

86. *Dressing stations* were formed in the date grove to the North of the town for the wounded from the trenches. They consisted of excellently made dug-outs with shell-proof overhead cover. Here the wounded were re-dressed if necessary, fed and rested before being sent on to the hospitals. This place, however, was exposed to a certain amount of sniping and shell fire and had to be abandoned. After this bearer divisions went out to the front line trenches and Fort in the dusk of the evenings with stretchers and, if necessary A.T. carts, and brought the wounded to their field ambulances.

87. The *regimental aid posts* consisted of dug-outs provided with covered protection against shrapnel. The wounded were at first taken to the dressing stations along the communicating trenches, but when dressing stations were given up, to the field ambulances.

Field ambulances were throughout the siege daily employed in collecting the sick and wounded from the first line trenches and the fort. In the early stage of our investment, before communication trenches were completed, this work was carried out under constant sniping, and on a few occasions under heavy rifle fire, during which some of the Army Bearer Corps personnel were wounded.

Efficiency of Work of the Medical Services.

88. The work of the medical services was carried out as efficiently as the limited equipment and short handedness allowed. I have already remarked on the more serious difficulties that had to be contended with and indicated that the duties of all ranks were heavy and conducted under high pressure continuously. Medical officers, assistant surgeons, sub-assistant surgeons, and every one on the staff of medical units were untiring in their efforts to ameliorate the sufferings and add to the comfort of the sick and wounded, and throughout the siege displayed most praiseworthy devotion to duty.

Regarding the lower establishments, on February 5th I entered in my diary: "I have been more and more struck by the way in which all parts of the menial establishments carry out their duties amidst the utmost continuous discomfort and under conditions by no means free from danger."

Embarkation Medical Officer.

89. An Embarkation Medical Officer was appointed for the evacuation of the 700 odd patients that were sent down on the "Mosul" and "Blosse Lynch," and for embarking the 1,100 sick and wounded sent down river on the capitulation of Kut.

Supply of Drugs, Dressings, etc.

90. No. 9 Advanced Depôt of Medical Stores, which we had ordered up as soon as Kut was captured by us, was able to provide medicines, surgical dressings and disinfectants throughout the siege, helped by the aeroplanes. Fortunately the possibility of requiring a good reserve in the depôt at so remote a town from our source of supply had been anticipated by the officer in charge and laid in. The medicines, dressings, etc. of two previous indents on Bombay had also just arrived in Kut. The British and Indian General Hospitals, Indian Stationary Hospitals and No. 4 Field Ambulance (already in Kut) were exceedingly well stocked with medicines, dressings etc., and their surplus came in most usefully.

91. On December 5th, 1915, I found 31 Reserve Dressing Boxes (Red Cross Gifts), for British infantry units, which with the permission of the Commanding Officers were taken over by the Medical Stores Depôt. On January 26th a few boxes of medical supplies were found in the Supply godowns and placed in the Medical Stores.

We had a large supply of formalin and flypaper in stock which were invaluable against the fly pest that occurred in April.

92. Our first task was to determine for what length of time the supply of the Advanced Depôt of Medical Stores would have to last out. Initially I put this at 3 months. On December 5th, 1915, I made a complete survey of the Medical Stores, and assured myself that so far as the supply of medicines and surgical dressings went, there would be sufficient for that period. When, however, the G.O.C. Division, about January 20th, intimated that the food of the garrison could hold out until April 17th, we were obliged to regulate the issues of our drugs, dressings, and disinfectants accordingly. There was a decided shortage of most drugs during the month of April, and throughout the siege the strictest economy had to be exercised, and the closest scrutiny on the expenditure kept up. We were able to be much more liberal with the dressings, which lasted out well.

93. The universal prevalence of diarrhœa and gastro-intestinal disorders led to an early exhaustion of astringents, whilst "fevers" and malarial relapses drained our diaphoretics. After the aeroplane service started we were almost always able to get the drugs and dressings more urgently required.

On December 11th, 1915, orders were given to limit compliance with indents to one week's requirements in corps units, and to 3 days' supply to medical units; all the latter were located in proximity to the Medical Depôt.

94. We had often to fall back on our own resources. For instance, in February we urgently required chloride of calcium for the treatment of scurvy. We had abundance of HCl (used with chlorate of potash for chlorinating water), and got some lime from the D.E.C. We issued nearly 2 lbs. of this drug daily for 2½ months, but it entailed an enormous amount of work on the Medical Depôt. The most used astringent was Dover's powder which we manufactured from opium, ipecacuanha powder and bicarbonate of soda. Castor oil we got from the Flying Corps, who were working the grain-grinding engines; Epsom salts from the Veterinary Section; cotton-wool was bought from the bazars, cleaned, teased, sterilized and used for our sceptic surgical cases; calico and other cloths were bought to use as gauze and bandages, and so forth.

95. By aeroplane we received large supplies of astringents (*e.g.* 20,000 lead and opium pills, 12,000 tabloids of Dover's Powder), phenacetin, salicylate of sodium, antitetanic serum, various surgical dressings, large-sized drainage tubes, etc.

The stock of medicines had gone down considerably by the end of March on the 27th of which month I wrote: "With the greatest economy it will last another 14 days. Had again to issue warning to medical units to exercise the greatest care in the issue of medicines and published a list of the various alternative drugs available for those that were running out."

96. On March 29th we sent a message to Corps Headquarters stating that or medicines and dressings were running low and that we should require the whole Advanced Depôt replenished on relief. On April 1st we were informed that a complete Advanced Depôt had arrived and was ready for us.

97. The manner in which the drugs and dressings lasted out was the most satisfactory part of the medical organization of the siege. It cannot be said that all patients got every drug that was required, but it may be stated that all serious cases of sickness got almost everything that was prescribed for them by medical officers, and that the dressings for the wounded were ample throughout.

The work of the No. 9 Advanced Depôt of Medical Stores was carried out with exemplary efficiency, and the issue of medicines, surgical dressings, medical equipmen and disinfectants regulated with much judgment by Capt. Weston, who commanded this unit.

Medical Comforts.

98. As in the case of the Advanced Depôt of Medical Stores I ascertained the quantity of medical comforts in charge of Supply Service and regulated the issue for three months. The chief item with which we were concerned was tinned milk of which there were 14,500 lbs. in stock. This permitted of a liberal issue. When, however, the time limit was extended to April 17th, it made a most material difference. We found that we had been prodigal and from January 21st had to reduce our issues considerably and abruptly.

99. On January 30th we had the following medical comforts to fall back upon:—

Milk, condensed	2,353	lbs.
Oatmeal	1,593	„
Cocoa	82	„
Calves foot jelly	6	bottles
Brandy	8	„
Beer	158	„
Port wine...	4	„
Whisky	52	„
Cornflour	417	lbs.
Benger's food	15	bottles
Macaroni	16	lbs.
Mellin's food	11	„
Essence, chicken	7½	„
„ mutton	1	„
Extract of beef	70	„
Tapioca	21	„
Pearl barley	60	„
Lime-juice, Rose's	18	bottles

100. Throughout the siege I kept a close watch on the Supply Stores, where periodically various articles of food and comforts appeared in small quantities from previously undiscovered sources, and were secured for the hospitals. This, amongst other things, is shown in the following extracts from my diaries:—

January 25th, 1916. Conversation with A.D.S. (re rations); obtained the following for hospitals: 11 bottles of brandy; one case whisky, some vermicelli, macaroni, chocolate, coffee, preserved fruit, tinned soups, lime-juice cordial, etc.

"January 28th, 1916. Secured through A.D.S. 13 cases of lime juice to be reserved for treatment of scurvy cases in Indian troops.

101. The issue of white bread ceased on February 10th, 1916, after which British troops' bread was made from

flour and atta. We, however, were able to draw 20 one-pound loaves of white bread daily for issue to the hospitals for special cases after its general issue had ceased, and this continued throughout the siege. At the beginning of February I got a large supply of dhall from the Supply Stores for hospitals.

102. February 5th, 1916. "The number of eggs supplied to hospital has been reduced to 20. This appears to me to be ridiculously few considering that every mess and many troops in trenches are able to get them. To speak to A.D.S. *re* this; if it is a question of paying more, then it must be paid for the sick's food."

103. On March 16th, I secured for the hospitals, 600 lbs. preserved fresh fruit; 350 lbs. cornflour, 45 lbs. arrowroot.

Further list of articles secured for hospitals on March 23rd, 1916:—

Cocoa	33	lbs.
Lime-juice	18	gallons.
Pickles	22	sm. botts.
Rice	35	maunds.
Tamarind	40	lbs.
Cornflour	258	,,
Essence mutton	¼	,,
Calves foot jelly	2	,,
Extract of beef	4½	,,
Pearl barley	7	,,
Beef dripping	11	,,
Benger's food	1	,,
Sugar	19	,,
Vinegar	28	gallons.
Dhall	198	lbs.
Dry limes...	66	,,
Arrowroot...	25	,,
Horlick's M. milk	6	,,
Pineapple	337	tins
Beer	15	bottles
Preserved fruit	275	lbs.
Essence of chicken	1¾	,,
Fish, tins	260	,,

104. Early in February several acres of land around the town were converted into kitchen gardens and such rapidly growing vegetables as radishes, onions, cress, and a few varieties of spinach were sown. There was at first great difficulty in watering them which was overcome.

From March 31st 100 lbs. vegetables were supplied to hospitals daily from the gardens. They had previously been producing only 50 lbs. a day.

105. "March 2nd, 1916. Secured all the stores suitable for hospitals for issue to sick from the miscellaneous collection in E. Section S. and T. In consultation with A.D.S. allotted these to the British Officers Hospital, B.G.H., the lime juice to I.G.H. and I.S H."

"April 11th, 1916. 60 lbs dates dropped by aeroplane, made over to hospitals."

"April 2nd, 1916. 4¾ lbs. of saccharin dropped by aeroplane. It was insufficient for whole garrison, so half given to hospitals, remainder to staffs' and officers' messes."

106. January 6th. "The supply of eggs is running down, also chickens. No potatoes nor onions now being issued."

"January 4th, 1916. Visited officers' hospital. Asked all officers if they were getting all they wanted as regards food, and they answered in the affirmative; also if they had any complaints to make and they said, 'No.'"

"January 5th. Saw and spoke to all patients of the B.G.N.; they all said food was quite satisfactory."

107. On February 7th I entered in my diary: "The Indian troops in medical units are now being much better fed than those of the rest of force. They are practically getting all their rations (including rice and dhall) with only a shortage of 8 oz atta, and tea. Told officers commanding medical units that they can buy tea in the bazar for their Indian troops and followers."

108. On March 6th I "directed officers commanding medical units to buy whatever food in bazars that they consider will improve the dietary of their patients."

109. We were, throughout the siege, able to obtain a limited supply of fresh milk, cream, eggs, chickens and fish, but only with considerable difficulty as the Arab vendors were consuming them or selling them surreptitiously.

110. The quantity of fresh milk varied, the average being about 120 pints per diem; at times for a week on end we got from 200 to 300 pints a day; it was nearly always of poor quality. Cream, about 8 lbs. a day was most useful. At the end of March several milch buffaloes and cows were wounded and the supply of fresh milk ran low, and this at a time when the stock of tinned milk was nearly exhausted. I insisted that the animals be not sent out to graze, but have the grass cut for them and that the husk of barley be given them. I told the A.D.S. on March 28th, 1916, that it was imperative that everything possible be done to maintain the supply of fresh milk. Until the last fortnight we were able to get on an average about 80 eggs daily. For a time, we were drawing 150-200 eggs a day. Fish was given to the British officers and selected cases amongst the British sick; it was very costly as the catches by Arabs had to be made in the presence of the enemy's snipers.

111. "February 24th, 1916 Diary. The supply of eggs to medical units has again been falling off. The quality of the milk has also undergone deterioration and lately has been adulterated with flour. Yesterday I found that the last half inch in a bucket consisted of a semi-glutinous mass. Represented these matters to the L.P.O. who stated that the eggs were being brought in at a later time—too late to be issued." They were then drawn at a later hour daily. "*Re* milk, he arraigned three contractors (suppliers) before the Military Governor, and had them punished."

"February 26th, 1916. Saw L.P.O. *re* milk and eggs. The milk was short but of better quality." On February 27th, 1916, the supply of milk had "improved in both quantity and quality."

112. At the end of March obtained 25 lbs. tea from Supply Stores; issued to British General Hospital.

On April 2nd "got for hospitals two maunds of gur and 7½ maunds of dates."

"April 7th, 1916. Obtained for hospitals 50 lbs. tea from the Supply Service."

113. After April 7th no further extras could be obtained from the Supply Stores for the hospitals. We had then to rely on about 140 pints of milk and about 40 eggs daily, as the only medical comforts available.

114. The most that can be said of the medical comforts is that they would have been ample for a two months' supply. Strict economy had to be commenced as early as January 21st, and continued until they were exhausted —about the middle of April, which means that a good proportion of the sick and wounded who would normally have got them did not.

Clothing and Bedding.

115. The clothing and bedding that had been supplied to the troops supplemented by one blanket was suitable and sufficient. The third blanket had been provided and issued to some of the troops before the siege began. Unfortunately many of the men lost part of their clothing and blankets which were abandoned at Aziziyeh. All available blankets in the Supply Stores were issued to the garrison, which ensured that all men had two blankets, a certain proportion had three. We had a certain number of extra blankets on hand in the medical units, which, with the bedding patients brought in were sufficient to keep them warm.

Most of the troops had only one suit of clothes, so that it was difficult to arrange about washing them. Cotton suits were made for a large number to allow of this being done.

Rations of Garrison During the Defence.

116. As previously stated the 6th Division arrived in Kut after Ctesiphon in a worn out and exhausted condition. For over a fortnight the troops had got their rations irregularly, and had few opportunities of preparing hot meals. Under the circumstances it was not considered advisable to commence a reduction of their rations at once except in potatoes.

117. The main difficulty was to determine the length of time the siege would last. The following abstracts from my diaries indicate the estimated quantities of food in stock and the progressive reductions made in the rations.

"December 11th, 1915. Had a long conversation with A.D.S., regarding rations available during our defence. From his tables it appears that we have *full rations* of following for the period stated:—

Flour (bread, Br.)	70 days
Atta (Ind. tps. & folls.)	70 days
Rice ,, ,, ...	70 days
Dhall ,, ,, ...	70 days
Curry stuffs, do. (are put on half rations of this already)	1 month
Fresh meat...	1 month

(exclusive of beef available from 78 bulls of bullock battery—each bull yields 600 lbs., *ergo* 18 additional days' rations at 3,000 lbs. per diem are available.)

Potatoes (at 6 oz. per diem.) ... ... 1 month
Onions (at 4 oz. per diem.) ... ... 1 month.
Tea and sugar, full supply.
Wood, deficiency, less than one month. (Troops put on short rations already.)
Medical comforts—with economy one month. (Abundance of tinned milk.)

"A.D.S. has purchased all tinned provisions (fish, sausages, etc.), procurable in bazars and from Sassoon & Co."

118. A large quantity of dates were found in the town, collected and issued from time to time, and served a very useful purpose when all sugar and butter were exhausted. An issue of 3 ounces twice a week was made from December 18th, 1915, and of 1½ oz. daily from March 1st until they were exhausted about March 20th, 1916.

From December 18th, 2 ounces of rice were given to British and Indian troops twice a week.

119. "December 29th. Had a long conversation with the A.D.S. as to how the rations were holding out. There are the following:—

"Abundance of flour, atta, ghi, dhall, bacon, butter, cheese; onions and potatoes (6 oz.) about 8 days. There is no more fresh meat so that from to-morrow tinned meat has to be issued. A certain number of animals are kept for the sick and wounded.

"There is over 14,000 lbs. condensed milk, abundance oatmeal, jam, dates, 48 lbs. Bovril, and a certain amount of stimulants.

"British troops have been receiving 12 oz. of fresh meat up to date daily; Indian troops have only had 3 issues. Beer has been issued to British troops up to date, but is now exhausted. A ration of rum can be issued. This is done at discretion of the G.O.C. Brigades."

120. Green vegetables were procurable in the bazars until the middle of January, but the regular issue of these to troops and followers had to be discontinued towards the end of December.

"January 20th, 1916. As tea is running short, issue to Indian troops and followers has been stopped and British troops put on half allowance (½ oz.) daily. The deprivation of tea was greatly felt by the Indian units and specially by the weak men in hospital." An issue of coffee was made every third day to British troops in lieu of tea from February 9th. Small supplies of tea for the sick and wounded were obtained a few days later, amd whenever it appeared in the bazars it was bought by the C.O.'s of Medical Units.

121. The beef of the 2 heavy battery bullocks and horse flesh were commenced on January 29th on alternate days. There was a prejudice against eating horse-flesh amongst all Indian troops except Gurkhas, who ate it from the first day of issue; gradually other classes of Indians began using it, especially Mohammedans; it was with difficulty that Mahrattas and Sikhs were induced to take to it; Rajpoots and Mahrattas held out longest and ran down most.

Under the G.O.C. Division's instructions, I issued the following:—

"Kut, February 5th, 1916. It has unfortunately become necessary to employ horse-flesh in the rations, and the following remarks are published with the view to remove any prejudices that may exist against it as an article of food.

"The horse is a clean animal, and essentially a vegetable feeder. It will not eat unclean food nor drink impure water. Its flesh is wholesome, digestible and practically in every respect as nutritious as that of any animal we are accustomed to eat. It contains all the nutritive principles or chemical constituents that the flesh of other edible mammalia does, and those troops who have already eaten it here, like it. In the absence of flesh food, troops will run down, be more susceptible to disease, especially to scurvy and beriberi. Both of these diseases have already given rise to a certain amount of inefficiency. In the case of Indian troops the absence of dhall and gur from the rations will have a detrimental effect on their condition in due course.

"It is natural that everything possible should be done to keep our troops in good health, and the use of horse-flesh is one of the means which will considerably aid in this direction."

122. On January 7th, I spoke to the A.D.S. again re rations. "The only fresh vegetable being issued was beans. I recommended that British troops receive pickles and that all Indian troops and followers get ½ oz. lime-juice every second day.

123. On January 22nd, the rations consisted of:—

British.

Bread	12	oz.
Meat	8	,,
Butter or cheese	3	,,
Potato meal	2	,,
Pickles	1	,,
Jam	3	,,
Dates	2	,,
Tea	½	,,
Sugar	½	,,
Salt	½	,,
Ginger	⅓	,,
Fuel	2	lbs

Indian.

Atta	8	oz
Rice	8	,,
Gur	¼	,,
Ghee	2	,,
Ginger	½	,,
Dhall	2	,,
Chillies	⅛	,,
Garlic	⅛	,,
Dates	3	,,
Potato meal	2	,,
Salt	¼	,,
Fuel	1	lb.

"February 5th, 1916. Yesterday afternoon in consultation with the A.Q.M.G. and A.D.S., arranged that the cereal food for troops should consist of—*British* ½ wheaten flour, ½ atta and ½ barley at once, and Indians ½ atta, ½ barley."

124. Great difficulty was experienced over fuel for cooking rations. After all brushwood had been cut, and all available timber of houses used, we had to employ crude oil (there was a large stock of this), for which special stoves had to be constructed.

An issue of ¼ lb. of barley meal was made to Indian troops and followers from February 6th. This was in addition to that in the rations.

125. On February 8th I noted in my diary: "A few days ago, 367 kerosine oil tins full of *ghi* were found walled up in one of the Native Officers wards of the Indian General Hospital—taken over by Supply Service. Another ward is full of barley—directed attention of A.D.S. to this."

From February 10th, British troops' bread was made from ½ wheaten flour and half atta. This continued for 24 days, after which the bread consisted of ½ wheaten flour, and half barley flour for another 24 days.

From February 14th, Indian troops and followers received ½ lb. atta and ½ lb. barley flour; from February 19th, they received 1 lb. of barley flour only.

126. "February 14th, 1916. At present about 28 days jam in stock for British troops at 2 oz. per diem. As we have worked out the staple articles on a 48 days' further siege, I recommended that jam be reduced to 1½ oz. for a week, and then to 1 oz. They are getting no sugar."

"February 21st, 1916. Two ounces of oatmeal issued every second day to British troops."

"February 21st, 1916. The further decrease of the cereal ration for Indian troops is being considered. The position appears to be that the present issue amounts to 160 maunds a day, and we can only grind 120 maunds per diem; there is a stored capital of (I understand), some 20 days' supply of ground cereals. This latter is now being expended to make up the difference between 120 and 160 maunds. If this arrangement continues the A.Q.M.G says he can carry on up to the end of March on the present ration. He does not hope to be able to grind more than 120 maunds per diem by any further improvements in mechanisms.

127. "In the original message sent by the G.O.C. to Corps Headquarters he stated that we had grain to carry on to April 17th. Personally I am strongly of opinion that the cereal ration cannot further be reduced without material deterioration in the physical condition, health and resisting power to disease in our Indian garrison.

Their ration has already been redued to 1 lb. a day (and that only half barley, half atta), they receive only ½ ration of ghee (1 oz. instead of 2), they get no gur, dhall or vegetables. Potentially the ration at present is only a trifle more than a subsistence diet (a diet of complete rest), yet the men have to carry out their full duties in trenches, piquets, and in maintaining the defensive works. On the present ration they may just be able to hold their ground, although I believe they will tend to lose stamina. With a further reduction they will lose weight rapidly, and be practically on a starvation ration." On February 27th, 1916, there were only 750 out of over 9,500 Indians eating horse-flesh. Early in April there was a rapid rise, and on the 14th of that month 9,239 were consuming it.

128. On February 28th, I recommended that the horse-flesh ration of British troops be increased to 1¼ lbs., per diem as the men were then getting no vegetables, butter or bacon, and only ¾ oz. cheese and 1 oz. jam. This increase began on March 1st.

129. The following are the rations issued to the garrison from March 4th, 1916:—

British.

Bread	¾ lb.
Horseflesh	1¼ ,,
Jam	1 oz.
Salt	½ ,,
Dates	1½ ,,
Ginger	⅓ ,,
Oatmeal	2 ,,

Indian.

Barley meal	¾ lb.
,, whole	6 oz.
Ghee	1 ,,
Salt	½ ,,
Dates	1½ ,,
Ginger	½ ,,
Tumeric	⅛ ,,
Chillies	½ ,,
Meat (to those who draw it) ...	8 ,,

The tea had run out on March 4th.

"March 5th, 1916. The amount and variety of 'extras' that the men can now buy in the bazar is somewhat limited—consists chiefly of chappatties, cakes fried in fat, and a small amount of dhall. There is still apparently an abundance of country tobacco."

130. On March 11th, the rations consisted of:—

British.

Bread	10 oz.
Meat	1½ lbs.
Jam	1 oz.
Salt	½ ,,
Ginger	⅓ ,,
Oatmeal	2 ,,
Dates	1½ ,,

Indian.

Barley flour	10 oz.
,, unhusked	4 ,,
Ghee	1 ,,
Ginger	½ ,,
Tumeric	⅛ ,,
Meat (to those who draw it) ...	8 ,,
Dates	1½ ,,

"For British this is just beyond a subsistence diet; for Indians it is less than a subsistence diet, and they will run down on it, lose stamina and scurvy will increase."

From March 11th, a concentrated soup was made for all British troops, and issued in the evening—it was greatly relished and appreciated.

131. From March 14th, British troops had the following added to their rations twice a week; butter 1½ oz.; bacon 1½ oz.; cheese 1 oz. This was continued for 14 days.

All units used the green herbs obtainable on the plain as vegetables, from about the middle of March. The chief of these herbs were: wild mustard, a species of clover, mint, wild carrots, small kind of thistle, dandelion, and plantain. Medical Officers were unanimously of opinion that the use of this green stuff had a marked influence for good in staying the progress of the epidemic of scurvy.

132. As there were some poisonous plants growing with the herbs, samples of the edible and poisonous ones were collected and placed in all Headquarters Offices for comparison.

133. From about March 10th there was a very appreciable decrease in the quantity of food cooked and sold in the bazars, and on March 25th I entered in my diary:

"No cakes or kababs are now being sold in bazars and the amount of food-stuffs purchasable is quite nominal."

"March 29th, 1916. Interviewed A.D.S. re food supplies:

"*Salt* is rapidly going down. I understand that there is sufficient for British troops for a fortnight and for Indians for only about five days. Advised that some be got by aeroplane." The A.D.S. after scouring the town obtained 800 lbs. of salt. The ration issued was about ⅛ oz. daily per man. Aeroplane at a later date, dropped 80 lbs.

"March 30th, 1916. Owing to errors in calculations as to quantity of barley available for issue, it is much to be regretted that the 3 oz. now issued for parching will have to be stopped. This puts Indians on a regular starvation diet. The deductions will commence from April 1st, 1916."

"April 2nd, 1916. One of the main defects in the British troops' diet at present is the practical absence of hydrocarbons—there is no fat on the horseflesh, and the great deficiency of carbohydrates; they get an 8-oz loaf which contains roughly only 6 ozs. of mixed wheaten flour and barley.

"In the Indian troops and followers' rations all the proximate principles are deficient to a marked degree; their diet consists solely of 10 ozs. very inferior barley flour and 1 oz. *ghi*."

134. On April 8th "the question of still further lowering the ration of barley flour was mooted by the A.Q.M.G. I told him that the men were now on starvation rations, in the technical sense of the income being greatly below the kinetic output, that even the present rations continued for a fortnight more would lead to many deaths. I suggested that the food grain of the town Arabs should be lowered instead of that of the troops who in every sense as our defenders, have greatest claim on it." The *ghi* ration ceased from April 8th, 1916.

135. From April 10th, Indians received 7 ozs. of barley flour per diem. "This (7 ozs. barley) with the green stuff collected is all that non-horse-flesh eaters now receive; it is an absolute starvation ration and represents, at most, 600 calories potential energy; the normal ration for field service for Indians is roughly 3,000 calories. It is anticipated that the men at the end of a week on this will be attenuated and many emaciated, that sickness will increase and a certain number of men will succumb. This reduction, however, has only been undertaken as the result of dire military necessity and to ensure the garrison holding out until the relief arrives. The Arabs of the town have already been reduced in grain to less than a subsistence scale."

About the middle of February we wired for 7 lbs. of saccharin. About 5 lbs. were dropped by aeroplane on April 2nd. It was insufficient to make a general issue and was reserved for the hospitals, staffs, and officers of the garrison.

136. As some men were suffering acutely from the pangs of hunger, 2 lbs. of *opium* was got up by aeroplane and 14,000 one-grain pills given to medical officers of corps units for issue to selected cases. It undoubtedly ameliorated the intensity of these men's sensations.

British troops felt the want of *tobacco* greatly. One day they told me that they were prepared to forego part of their ration if they could get enough tobacco for a few smokes a day. On April 14th I found the men of the 2nd Dorsets smoking three different kinds of substitutes—dried used tea-leaves, powdered dry ginger, and dried and broken-up orange leaves. Many officers were doing the same.

April 10th, 1916. "Still further reduction in rations will take place from to-morrow. British, 5 ozs. flour, 1½ lbs horse-flesh; Indians, 5 ozs. (barley) flour and 12 ozs. horse-flesh."

On the night of April 24th/25th the steamer "Julnar" failed to get through to Kut. She, I was informed, had 250 tons of food on board, which it was stated would have been sufficient for subsistence diet for from 16 to 20 days.

Sanitation of Garrison During the Defence.

137. The sanitation of the areas occupied by our troops and followers was conducted on the principles detailed in my statements for the periods (*a*), (*b*), and (*c*), and, even under the conditions of the siege, gave rise to little trouble and was carried out satisfactorily.

On December 3rd a sanitary officer was appointed to each brigade, and the orders regarding chlorination of water, incineration of night-soil and animal rubbish, etc., republished. Units that had lost their chlorinating apparatus were supplied with others from the Medical Depôt. There were practically no difficulties encountered in the trenches and fort, where the complete absence of flies indicated that the sanitary work was conducted *secundum artem*—pan system of removal of night soil associated with deep burial, and absorption pits for urine; the water-supply was obtained from the river to which communicating trenches were made and the water drawn by hand pumps.

138. The sanitary task of the billeted areas was less simple. Previous to the siege several public latrines were erected for Arabs on the outskirts of the town. These were kept clean by Arab sweepers who deserted when the siege began. The latrines were taken over by the corps units billeted in and near the town, and kept clean by an establishment of our own. The night soil of these was consumed in adjacent incinerators. Other latrines and incinerators were erected to meet requirements. In the wet weather the incinerators failed and deep burial had to be resorted to. In the later stage of the siege incineration was relinquished; there was not enough stable refuse (which was used as fuel) to keep it up. Urine pits were employed throughout for the garrison in Kut.

Water-Supply of the Billeted Troops

Throughout the siege the water-supply question was an exceedingly difficult one both as regards the billeted troops and those in the neighbourhood of the town. For the first few days water was drawn directly from the river, but subsequently this was impossible on account of the activity of the enemy's snipers. Then trenches communicating with the river were made and pumps protected by maheillahs, etc., were fixed. Even under this arrangement casualities were frequent.

140. Later the water-supply was from three excavations lined with canvas tarpaulins, each of 27,000 gallons capacity and about 200 yards from the river. They were connected with raised surface uncovered channels which ran to the river and were filled by an oil-engine pump working on the bank. Direct access to the channels was prevented by a barbed wire fence. The water from the reservoirs was drawn by hand pumps. Of the three troughs two were used as settling reservoirs whence the water was siphoned into the third from which the supply was drawn. This arrangement ceased when the level of the river fell below that of the suction pipe of the pump and the banks fell in and blocked the sump; then hand pumps on the river bank had once more to be resorted to. A similar reservoir excavated for the civilian people reduced the casualties from snipers. These reservoirs were under cover.

141. A water-supply scheme for animals, horses, mules, and battery bullocks, was also established in connection with reservoirs at the East end of the town; this was a great boon and saved many animals.

Disposal of the Dead.

142. As soon as the siege began separate burial places were selected for British and Indian troops and followers; the British were interned in a small cemetery to the N.E. of the town; the Indians in the old cemetery adjacent to the brick kilns.

Disposal of Dead Animals.

143. The disposal of carcases of dead animals (horses, mules, cattle, etc.) was associated with numerous difficulties. During the early stage of the siege, when the mortality from snipers and gun fire was high, the carcases were partially incinerated, and then deep buried, or they were thrown into the river. In the mid-period of the siege they were completely incinerated, heavy oil being used to help in the process—deep burial was too big a task to continue. Using the river became dangerous as the men dragging the animals were sniped. Finally, the carcases were deposited in a deep ravine, partially incinerated and covered with two feet of earth. At the time of capitulation we had to destroy a number of horses; these were placed in deep pits, shot *in situ*, and covered with earth.

Sanitation of the Civil Town of Kut.

144. On December 4th, I appointed a health officer, organized and started the sanitary work of the civil town. This proved to be one of my heaviest duties throughout the siege.

The *sanitary personnel* consisted of the health officer, one British and one Indian N.C.O., and some privates from British and Indian infantry units, several Indian and Arab sweepers, six donkey boys and 12 donkeys for removal of dry refuse; Arab coolies were employed when required to assist in the work. The sanitary squad supervised the work of the Arab sweepers and the donkey boys, and, as far as was practicable, saw that the elementary sanitary rules promulgated were duly observed.

The supervision of the *conservancy* was heavy; the civil population used the thoroughfares as latrines, and sweepers threw the night-soil in unauthorized places instead of into the deep pits for the purpose; disciplinary measures had to be resorted to frequently. Sniping and bombardment necessitated the trenching grounds being on the confines of the town, and carrying on conservancy work mainly at night when supervision was limited.

145. Rough latrines were improvised in various parts of the town from which the ordure was regularly removed to the deep trenches outside the town. Owing to the overcrowding in some quarters the latrine accommodation was insufficient; a large number of houses had no privies at all. To meet these cases latrines were erected on the roofs and the excreta removed daily and buried. This arrangement was greatly interfered with during rainy days Urine pits were excavated, but the Arabs continued to use the thoroughfares and their own compounds as urinals.

When the siege began large quantities of *dry refuse* which had been collected in heaps promiscuously in various parts of the town for years had to be removed. As the donkeys could not remove all this A.T. carts were used, the refuse being put into gunny bags. The streets and bazars were daily swept and the refuse deposited at the dumping ground to the East of the town.

Flies.

146. For the first two months of the siege the flies were in small numbers only. During March and April, however, they increased very considerably, and before the capitulation were in swarms everywhere. Climatic conditions and use of disinfectants were, to some extent, unfavourable to their breeding to the end of February, then the rising temperature, shortage of disinfectants and insanitary condition of the town generally fostered their multiplication.

147. The Health Officer and Military Governor were in perpetual conflict with the Arabs of the town who persisted in their insanitary practices which have been already alluded to. The custom of using the alluvial plain on the outskirts of the town as a latrine having been interfered with by the enemy's snipers and bombardments, the people defæcated in any available spot within the town, mainly at night. The streets continued to be used as urinals. Corporal punishment had little effect in stopping these habits. Our sanitary squads went round the whole town regularly and cleared up all visible filth. The ultimate effect was that when the hot weather began, about the time of the capitulation, the whole town was distinctly malodorous. Kut was, of course, densely overcrowded and housed considerably more people than it did before the siege began.

148. The civil population experienced much difficulty regarding its water-supply. After the first few days of the siege all the approaches to the river were dangerous as they were covered by the enemy's snipers. This necessitated the inhabitants drawing water after dark. After December 20th, 1915, the enemy sniped everyone coming to the bank. On December 28th, one girl was shot dead, two women sustained gunshot fractures of the legs, one man was hit in the head and another in the chest. Covered trenches communicating with the river were made on the Western side of the town. We assisted them as mentioned in the last section.

149. Although the covered bazar was allocated to the General and other hospitals, some shops were opened in various parts of the town and the people started food stalls in several of the main streets. The chief of these was in No. 1 Avenue which was for the first three months thronged with vendors and purchasers. There was a much smaller bazar in No. 3 Avenue. These were the two bazars used by our troops and followers.

Separate shops for the sale of staple articles of food—atta, barley flour, lentils, dried beans, dates and meat, were opened for the sale of these articles to the civil population only; these were under the Military Governor.

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